BA SEMESTER-1(THEO	
COURSE	COURSE OUTCOMES
SECTION - A	
(a) Historical study and detailed description of the Ragas prescribed in the syllabus	(a) The students get the knowledge of characteristic features of ragas. They study about the theoretical aspects and historical background of the ragas that they sing. They get the knowledge of the origin of raga, their chalan and how to differentiate between similar ragas.
(b) Ability to write the notation of Vilambit and DrutKhyalas in thefollowingRagas:(i)Yaman, (2)Alhaiya- Bilawal(3) Bhupali.	(b) The students learn to write the practical compositions of Vilambit and Drut Khayals in different thekas of taals according to the Notation system.
SECTION – B (a)Definition of the following: Sangeet,Shruti, Naad, Swar, Saptak,Raag,That,Vadi,Sam vadi,Anuvadi,Vivadi,Taali,K hali,Aa-vartan.	(a) The students learn the various basic terms with the historical development – Swar, Shruti, Sangeet, Naad, Raga, vaadi, samvaadi, taali, khali etc.which is essential for developing the basic knowledge of indian classical music.
(b)Historyof indian Music from Vedic period to 12th Century.	(b)The Students get information about the musical references in Vedas, Purana's, and Epics etc. He able to learn about the origin of music, different forms of singing, musical instruments, dance forms and different musical terms during this period and its Relevance to present time.
ECTION – C	
) Relationship of Folk and lassical Music.	(A) Able to understand about the characteristics and Inter- relationship of classical & folk music. The students able to differentiate between Classical Music and Folk Music.

(b) Contribution to Indian Music by the followings :(1) Pt.Vishnu Digambar Pluskar, (2) Pt. V.N. Bhatkhande.	Music Vocal Department composers, acquire knowledge about the contribution of different scholars towards Indian music, attain knowledge about various patterns of compositions. They gain Knowledge about the Guru Shishya Paramparas and tribute to their Gurus.
(c) Ability to write Thekas with dugun in the following Talas:-(1) Ektaal(2) Chartaal (3) TeenTaal	(c)The Students gain knowledge of music's basic talas. They able to write theka and Dugan of talas. They able to learn about the techniques and mathematical foundation of taals.
BA SEMESTER-II	
PAPER-II (THEORY)	
COURSE MV22	COURSE OUTCOMES
SECTION - A	
(a) Historical study and detailed description of the Ragas prescribed in the syllabus.	(a)The students get the knowledge of characteristic features of ragas. He studies about the theoretical aspects and historical background of the ragas that they sing. They get the knowledge of the origin and chalan of ragas. They able to differentiate between similar nature ragas.
(b) Ability to write the notation of Vilambit and Drut Khyalas in thefollowingRagas: -1. Hamir 2 Vrindavani- Sarang (3) Kaafi	b) The students learn to write the practical compositions of Vilambit and Drut Khayals in different Thekas of taal according to the Notation system.
SECTION – B	
	(A)The students learns about the characteristic of different forms of Hindustani music, such as Khayal, Tarana, aalnkar,varn,Parmelparveshak raga. The students gain knowledge about the aspects of Western music such as Maje toner and Minor tone.

(b) Difference between Margi & Deshi Sangeet.	(B)The students learn about two singing forms of ancient time - Desi and margi sangeet. And able to differentiate between Margi and Desi sangeet.
(c) Gayakon Ke Gun-Dosh.	(C) The students learn about the merits and demerits of gayak (Singer). They able to gain knowledge how to remove defects of their singing style.
SECTION - C	
(a) The role of Music in National Integration.	(a) The students learn the value of National Integration through music. They learn how different types of music (folk, Bhakti, filmy, Lok- sangeet, classical music etc.) media (Radio, Television, Internet etc.) music education, school prayers etc. binds Indian society in unity
(b) Contribution to Indian Music by the followings:(1) Pt. Omkar Nath Thakur (2) Ustad Abdul Karim Khan	(b) The Students able to understand the life history of various composers, acquire knowledge about the contribution of different scholars towards Indian music Attain knowledge about the musicians who were exponent in particular type of musical form, Students could analyses different schools of music by way of learning about musicians.
(c) Ability to write Thekas with dugun in the following Talas:-(1) Tilwara(2) Jhaptaa(3) Rupak	(c)The students attain knowledge about particular kind of Talas. They able to write theka with dugun of tala. They able to learn about the techniques and mathematical foundation of Talas.
PAPER-2(PRACTICAL)	
COURSE	COURSE OUTCOME
(a) Two Vilambit Khyalas in primary style of Gayaki in any of the prescribed Ragas.	(a) Able to perform two Vilambit Khayal with alap and taans
(b)One Drut Khyal with Aalap and Tanas in each of the Ragas as prescribed in the syllabus.	(b)Able to perform one drut khayal with alap and taal in each of the raag prescribed in the syllabus.

(c) One "Lakshan Geet" OR	(c) The students able to perform Lakshana Geet or sargam
"Sargam Geet" and "Tarana" in any of the prescribed ragas.	geet and Tarana in any of the prescribed ragas.
(d) Any Three Thaat based Alankaras in any prescribed Taal with Tabla in each of the thaat: Bilawal, Kalyan	(d) The students able to perform that based (Bilawal, Kalyan and Kafi) alankars in any prescribed taal.
and Kafi. (e) Ability to demonstrate Jhaptaal, Ektaal and Chautaal by hand in Thah and Dugun Layakaries by reciting bols.	(e) Able to perform Jhaptaakl ,ektaal and chautaal by hand in thah and dugun laykaries by reciting bols.
(f) Playing of the bols of Teentaal and Rupak on	(f) Able to play rupak taal and teentaal on table.
Tabla. (g)One Dhrupad OR Dhamar in any of the prescribed Ragas. (h) One Geet OR Bhajan to be presented in any Raga	(g) Able to sing and perform drupad or dhamar singing form in any of the prescribed raga. (h)Able to perform one geet or bhajan (light music form) in any raga and taal.
and Taal BA SEMESTER-III	
PAPER-I (THEORY) MV23	
COURSE	COURSE OUTCOMES
Section- (A) (A) Historical Study & detailed description of the ragas prescribed in the Syllabus.	a) The students get the knowledge of characteristic features of ragas. He studies about the theoretical aspects and historical background of the ragas that they sing. They get the knowledge of the origin of raga, their chalan and how to differentiate between similar natured ragas.
	(b) The students learn to write the practical compositions of Vilambit and Drut Khayals in different Thekas of Talas

(B) Ability to write the	Music Vocal Department
notations of Vilambit and Drut Khyalas in the following ragas: 1. Shuddh- Kalyan 2. Jaijaiwanti 3. Malkaun (c) Ability to write Thekas with Dugun and Chaugun in the following talas: 1. Ada - Chautal 2. Deepchandi (3) Jhaptal	(C) The students attain knowledge about particular kind of Talas. They able to write theka with dugu and Chaugun layakaries. They able to learn about the techniques and mathematical structure of talas. They are able to differentiate between different talas.
Section-B (A) Detailed study of following shailies: 1. Dhrupad 2. Dhamar 3.	(A)Obtain knowledge abou the most ancient and the modern genre of hindustani classical music. They able to gain knowledge about the origin, development and singing styles of Dhrupad, Dhamar, Thumari and Khayal.
Khayal 4. Thumari (B) Short notes on the following: Avirbhav- Tirobhav, NayakNayaki, and Jaties of Raga.	(B) Able to gain knowledge about the music terms avirbhav tirobhav, nayak -naayaki. They gain knowledge about different jaties of Raga system.
(c) Placement of swaras on shruti by Bharat, Ahobal and Lochan.	(cThe students able to learn about knowledge of placement of swar on shruti in ancient and medival period by bharat, matang and Ahobal. They learn different principals of placing shuddh and komal swars on 22 shruties.
Section- C	
(a) Role of science in promoting educational and cultural aspects of music during modern period.	(a) The students obtain knowledge of Therapeutically value of music This also develops knowledge of the contribution of science and scientific invention in Indian music and culture. Attain knowledge about the values of teaching using different aids.
music by the following:	(b)The Students able to understand the life history of various composers, acquire knowledge about the contribution of different scholars towards Indian music Attain knowledge
Khan 2. Pt. Malikarjun	about the musicians who were exponent in particular type of musical form, Students could analyses different schools of music by way of learning about musicians.

BA SEMESTER-IV	
PAPER-I (THEORY) MV24	
COURSE	COURSE OUTCOMES
(a) Historical study and detailed description of the ragas prescribed in the syllabus.	(a) The students get the knowledge of characteristic features of ragas. He studies about the theoretical aspects and historical background of the ragas that they sing. They get the knowledge of the origin of raga, their chalan and how to differentiate between similar ragas.
(b) Ability to write the notations of Vilambit and Drut Khyals in the following ragas: 1. Bhairav 2. Bhairavi 3. Khamaj 4. Kedar.	(b) The students learn to write the practical compositions of Vilambit and Drut Khayals in different Thekas of Talas according to the Notation system.
(c) Ability to write Thekas with Dugun in the following talas: 1. Tilwara 2. Tivra 3. Ektaal	(c) The students attain knowledge about particular kind of Talas. They able to write theka with dugun of tala. They able to learn about the mathematical foundation of taals and knowledge of different layas Learning the basic Tala techniques to be able to give a practical demonstration of a particular tala. The student is able to demonstrate various aspects of talas. They are able to differentiate between different talas.
Section- B (a) Detailed study of following shailies: 1. Tappa 2. Chaturang 3. Tiravat 4. Geet 5. Bhajan (b) Write the short notes on the following: Gram,	(a) The students able to gain knowledge about the origin, development and singing styles of semi classical genres. (b) The students able to understand definition of various musical concepts. They develop understanding of Gram-Murchana, tanpura and sahayak Nada terms in the historical perspective.

Shayak Naad	Music Vocal Department
(c) Placement of Swaras on Sruties by Pandit Pundrik Vitthal and Ramamatya.	(c) The students able to learn about the placement of swar on shruti in medieval period by karnatak music scholars. They learn different principals of placing shuddh and komal swars on 22 shruti's.
Section-C	
(a) Contribution towards music by the following:1. Pt. Bhimsen Joshi 2. Ustad Allaudin Khan 3. Ustad Faiyyaz Khan	(a) The Students able to understand the life history of various composers, acquire knowledge about the contribution of different scholars towards Indian music Attain knowledge about the musicians who were exponent in particular type of musical form, Students could analyses different schools of music by way of learning about musicians.
(b) History of Music in Medieval period.	(b)The Students get information about the musical references from various musical texts of medieval period. They get information about the condition of music, different forms of singing, musical instruments, dances forms, music related facts of prominent places and different musical terms during this period and its relevance to present time.
PAPER-2(PRACTICAL)	
COURSE	COURSE OUTCOME
(a) Three Vilambit Khyalas with extempore Aalaps and Tans in each of the ragas as prescribed in the syllabus.	(a)Able to perform three vilambit(slow) Khayal with Aalap and taan in different ragas prescribed in the syllabus.
(b) One Drut Khyal with Aalap, Bolaalap, Tans and Bol tans in all the prescribed agas, out of the four Drut Khyala	(b)Able toPerform One drut (fast) Khayal with aalap, bolaalap, tans and boltaans.
c) One Drut Khyal may be	(c)Able to sing one drut khayal in any taal other than teenta

(d) Abla to the Taga
(d) Abla to the Tage
(d)Able to perform Tarana in any of the prescribed raga
(e)Able todemonstrate Ada- Chautal, Tilwara, Tivra and Deepchandi with reciting bols by hand in Thah and Dugun layakaries
(F)Able to play Chautaal and Ektaal on tabla.
(g) Able to play notation of Saraswati Vandana on Harmonium Instrument.
(h)Able to sing thaat based alankars with Tabla in khamaj, bhairav and aasavri Thaat.
COURSE OUTCOMES
(a) The students get the knowledge of characteristic features of ragas. They study about the theoretical aspects and
historical background of the ragas that they sing. They get the knowledge of the origin of raga, their chalan and how to differentiate between similar natured ragas.

(B) Ability to write the	Music Vocal Department
notation of Vilambit and Drut Khyalas in the following ragas: (1) Todi (2) Puria- Dhanashree (3) Basant (4) Kamod (5) Bhimpalasi	(b) The students learn to write the practical compositions of Vilambit and Drut Khayals in different thekas of tals according to the Notation system.
(c) Ability to write Dhamartaal, Dadra taal & Sooltaal with Dugun Tigun and Chaugun layakaries	(c) The students attain knowledge about various Talas. They able to write theka with dugu, tigun and Chaugun layakaries. They able to learn about the techniques and mathematical structure of taals. They are able to differentiate between different talas.
SECTION-B	
(A) Origin and development of Notation System Merits and demerits of Notation system.	(A)The student able to gain knowledge about origin and development of different indian music's notation system during Vedic and medieval period. They able to Understand the merit and demerit of notation system.
(B) Lalit Kalaon mein sangeet ka sthan.	(B)The students gain knowledge about what is Fine Arts? And what is the place of music in different fine Arts?
(C) Contribution of the following Scholars to Indian music. (1) Acharya K.C.D.Brihaspati(2) Lal Mani Mishra (3) Pt. Vinayak Rao Patwardh	(C)The Students able to understand the life history of various composers, acquire knowledge about the contribution of different scholars towards Indian music Attain knowledge about the musicians who were exponent in particular type of musical form, Students could analyses different schools of music by way of learning about musicians.
SECTION- C	
(A) Critical analysis of the time theory of Ragas.	(A)The students able to get knowledge about different Time theories of Ragas and critical analysis of time Theory of Indian raga System.

	Music Vocal Department
(B) Essay on Teaching of Music through Gharana and Education Institutions.	(B)The student able to Gain knowledge How music is taught through Gharana system and by educational institution in the Medieval and Modern period. They able to gain knowledge about the merit and demerits of Gharana education System and Modern Educational System.
BA SEMESTER-VI PAPER-I (THEORY) MV26	
COURSE	COURSE OUTCOMES
Section-A (A) Historical study and detailed description of the ragas prescribed in the syllabus.	(a)The students get the knowledge of characteristic features of ragas. They study about the theoretical aspects and historical background of ragas that they sing.
(B) Ability to write the rotation of Vilambit and Drut Khyals in the following ragas: - (1) Miyan ki- Malhar(2) Bihag3) Deshkar (4) Bahar	(b) The students learn to write the practical compositions of Vilambit and Drut Khayals in slow, medium and fast tempo of talas in raags according to the Notation system.
(C) Ability to write thekas with Dugun, Tigun and Chaugun layakaries of the followings talas: -(i)Teental (ii) Jhaptal(iii) Keharwa	(C)The students attain knowledge about Talas. They able to write Tala theka with dugu, tigun and Chaugun layakaries. They able to learn about the techniques and mathematical structure of talas. They are able to differentiate between different talas.
Section –B (A) Historical survey of Indian music from 17th to 19th Century	(A) The students learn the history of music in different periods from 17thto19th century. It develops their ability to understand the development of music through ages and the present music is related with old established concept. They get knowledge about the origin and development of new singing styles ragas, instruments and music terminologies, state of music in society before and after attaining independence.

Music Vocal Depa	rtment
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- (B) Voice-Culture.
- (b) The students gain knowledge about what is voice?
 Involvement of other subjects in voice, voice and its
 greatness as a Musical instrument, How to cultivate the voice
 into an impressive Singing voice?, The Science of voice
 Production, What is a voice quality in scientific view?,
 Basics of voice culture, The benefits of voice culture, The
 Importance and need of voice culture.
- (C) Contribution of the following Scholars to Indian music-(i) Ustad Amir Khan, (ii) Gangubai Hangal, (iii) Krishan Rao Shankar Pandit.
- (c)The Students able to understand the life history of various composers, acquire knowledge about the contribution of different scholars towards Indian music Attain knowledge about the musicians who were exponent in particular type of musical form, Students could analyses different schools of music by way of learning about musicians.

Section-C

- (a) Elementary Knowledge of the folk music of Haryana & Punjab
- (a) This section provides knowledge of folk music of Haryana and Punjab. The student acquires knowledge of folk culture, language, songs sung on various occasion, dances, various instruments etc. of Haryana and Punjab. They able to know how both these provinces have cherished their own culture in their Music. Students get knowledge of folk culture of Punjab state along with their folk music
- (b) Classification of Instruments during Vedic Period, Medieval Period and Modern period
- (b)The students get Knowledge about various music instruments (percussion, non-percussion, wind, stringed instruments) of Vedic, medieval and Modern Period. They get knowledge of the gradual development of Indian musical instruments of the different periods. They get knowledge of the prevalent methods of renewal, development and classification of instruments. They able to learn that Percussion instruments are the main class of accompaniments used in vocal music and the students obtain knowledge about the role played by the percussion instruments in applied music.

PAPER-2(PRACTICAL)	lusic Vocal Department
COURSE	COURSE OUTCOMES
(a) Four Vilambit Khayalas with extempore Aalaps and Tanas in each of the ragas as prescribed in the Syllabus.	(a) In this section students learn 9 ragas in different thaat. They able to perform Four Vilambit Khatals with extempore Aalaps and Tanas.
(b) One Drut Khyal with Aalap, Tanas and Bol- tanas in all the prescribed Ragas, out of the five Khyalas.	(b) The students able to perform one Drut Khyal with Aalap, Tanas and Bol- tanas in all the prescribed Ragas, out of the five Khyalas.
(c) One Drut Khyal may be set to any tala other than Teental.	(c) The students able to perform One Drut Khyal set to other than Teental.
(d) Ability to demonstrate Dhamar, Sooltal, Teental, Jhaptaal, Dadra and Keharwa taal with reciting bols by hand in Thah, Dugun, Tigun and Chaugun layakaries.	(d)The studentas able to demonstrate Dhamar, Sooltal, Teental, Jhaptaal, Dadra and Keharwa taal with reciting bols by hand in Thah, Dugun, Tigun and Chaugun layakaries.Students learn Taals and various layakaaries on hand which make themselves strong in rhythem.
(e) Ability to play the following talas on Tabla: - Dadra and Keharwa Tala.	(e) The students able to play the following talas on Tabla: - Dadra and KeharwaTala.
(f) National Anthem OR Patriotic song on Harmonium will be presented by the candidate	(f)The students able to perform National Anthem or Patriotic songs on Harmonium. They able to play harmonium Instrument.

required to sing a Vilambit and Durt Khayal in a raga of the Examiner's choice.

(b) One Dhrupad OR one Dhamar and one Tarana with Dugun, Tigun and Chaugun layakaries.

(c) The students able to sing a Vilambit and Durt Khayal in a raga of the Examiner's choice.

(h) The students able to perform One Dhrupad OR one Dhamar and one Tarana with Dugun, Tigun and Chaugun layakaries. They alsolearn to perform dhrupad,dhamaar Tarana gaayaki to enhance their knowledge to learn distinctive style other than khayal.

(i) Tunning of Tanpura by the candidate will be asked.

(i) The students able to Tune Tanpura and gain Knowledge of different Musical octaves.

COURSE OUTCOMES OF BCOM (CAV)-2ND YEAR

B Com Computers is a 3-year bachelor's degree course that provides students with an in-depth understanding of computer programming, applications, software development along with business management. This course is mainly for students who have an aptitude for computer programming and an interest in commerce. DBMS (The objective of the course is to present an introduction to database management systems, with an emphasis on how to organize, maintain and retrieve - efficiently, and effectively - information from a DBMS) are taught in 3rd Semester, DATA STRUCTURE(Data structures and algorithms (DSA) goes through solutions to standard problems in detail and gives you an insight into how efficient it is to use each one of them) in 3rd Semester, JAVA (Use an integrated development environment to write, compile, run, and test simple object-oriented Java programs) in 4" Semester, ADVANCED COMPUTER APPLICATION(Demonstrate a basic understanding of computer hardware and software Demonstrate problem-solving skills. Apply logical skills to programming in a variety of languages) in 4111 Semester. Program includes various accounting courses, enables the students to gain theoretical and problem solving ability of the students. Programme curriculum result in the office atomization with computers and computer software application. Students will get the Practical skill to work as accountant, audit assistant, Tax consultant and computer operatorsas well as financial supporting services.

At the end of three year B.Com programme with specialization in Computer Application, the students will be able to understand the application of business Knowledge in both theoretical and practical aspects. Doing become in computer applications is a good thing it has good scope in future as IT sector is a vast growing sector in the country. They can work in a variety of fields ranging from advertising, software, e-business, and management related jobs. Are thoroughly trained in methods of analysis, including the mathematical and computational skills appropriate for problem solving, graduate by the time of graduation will demonstrate: Outcome a: an ability to apply knowledge of computing and mathematics appropriate to the discipline, Outcome b: an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution, Outcome c: an ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs,

GOVT. P. G. COLLEGE AMBALA CANTT.

Department of Economics

Syllabus Outcome as Per Syllabus of KUK

SEMESTER I (EC-21): PRINCIPLES OF MICROECONOMICS - I

This paper introduces students to the basic concepts in microeconomics. The objective of the paper is to analyze how individual decision makers, both consumers and producers behave in a variety of economic environments. Students are introduced to the definition and basic concepts of microeconomics theory, such as consumer theory, production and costs, market structures, income distribution and factor pricing, and international trade among others. Specifically, the course describes the essential elements of microeconomics from a theoretical and analytical point of view.

SEMESTER II (EC-22): PRINCIPLES OF MICROECONOMICS - II

This is a sequel to Principles of Microeconomics—I covered in the first semester. The objective of the paper is the same as in Principles of Microeconomics—I, giving an insight into different types of market structures, consumer and producer theory, along with international trade, and income distribution and factor pricing.

SEMESTER III (EC-23): PRINCIPLES OF MACROECONOMICS - I

This paper introduces students to the basic concepts in Macroeconomics that deals with the aggregate economy. Students are introduced to the definition and measurement of macroeconomic variables like GDP, consumption, savings, investment, and balance of payments. The paper also discusses various theories of determining GDP in the short run. SEC-I: UNDERSTANDING THE ECONOMIC SURVEY AND UNION BUDGET

This paper seeks to introduce students to concepts related to the Economic Survey and Union Budget, as also the contemporary themes in India's development. Topics include GST, prices and inflation issues, external sector and climate change. An in depth understanding of this paper helps students appreciate and contribute to reports, government documents and media discussions.

SEMESTER IV (EC-24): PRINCIPLES OF MACROECONOMICS-II

This paper is a sequel to Principles of Macroeconomics—I, it analyzes various theories of the determination of national income in greater detail. It also introduces students to the concepts of inflation, its relationship with unemployment, and some basic concepts in an open economy. SEC-II: RESEARCH METHODOLOGY This paper helps students learn the introductory research skills in writing data-based term papers, and project reports, Introduction to the nature of research, formulation of the research topic, research approaches and ethics, and types of data help increase the suitability of students for research based work in the corporate sector, government institutions and media.

SEMESTER V (EC-25): INDIAN ECONOMY -I

The course reviews Capitalist, Socialist & Mixed economy, Developed and Developing Economy —Concepts. The paper provides an insight into the issues such as basic characteristics of Indian Economy as a Developing Economy, comparison of Indian Economy with Developed Economies and major Issues of Development in India. It also reviews theory of demographic transition, size, growth and features of Indian population. Moreover, the paper studies measurement of poverty, Causes of Poverty, Measures of Eradication of Poverty, Agricultural Productivity — Causes of Low Productivity & Measures, Green Revolution—Achievements and Sources of Agricultural Finance. The purpose of this paper is to provide a comprehensive view of the issues at hand, and to make them aware of the current burning issues facing the Indian economy.

SEMESTER VI (EC-26): INDIAN ECONOMY -II

This paper examines sector-specific polices and their impact in shaping trends in key economic indicators in India to the third-year students in their sixth semester. It highlights Role of Industrialization, Industrial Policy — 1991onwards, Characteristics of Industrial Labour, Industrial Disputes Causes, Measures for Settlement, Social Security Measures in India. Moreover, it highlights Trends and Composition of India's Imports, Trends and Direction of India's Exports, EXIM Policy of India in relation to Trade Liberalization and its Impacts. It also throws light on the trends and performance in the services sector in terms of its growth, productivity, diversification, competition policy, and foreign investment among other things. The purpose of the paper is to provide a more

comprehensive view of the students, making them more aware about the economic activities taking place around them.

B.COM. SEMESTER -I (BC -102): MICROECONOMICS

This paper is designed to expose students to the basic principles of microeconomic theory, introducing them to topics such as basic demand, supply tools, and the implications of taxation and subsidies on the market outcome, consumer and producer behaviour, production and cost analysis, market structure, and labour market theory. By the end of the paper, students are well acquainted with the principles of microeconomic theory, and ways in which the theory can be used in its applications of the real world.

B.COM. SEMESTER -I (BC-202): MACROECONOMICS

This paper introduces students to macroeconomic fundamentals and concepts, theories and applications with regard to variables such as GDP, consumption, savings, investment, money and banking, and balance of payments. Students can apply the basic principles learnt from this paper in understanding the functioning of the aggregate economy, and in contributing to policy debates.

Bcom (cav) 5th semester Subject outcomes

Role of computer in bcom: - BCom Computer Applications will impart you with the knowledge of IT, Computer systems and applications along with business statistics, accounting, database management, to name a few. On the other hand, BCom general course will provide you with a holistic understanding of the commercial industry from the core subjects like Accounting, Management, Statistics, Economics to Marketing, E-commerce, Income Tax Laws.

After completing BCom general, you can explore entry-level jobs as Banker, Business Consultant, Manager, Financial Analyst, Business Analyst, etc. while BCom Computers graduates can discover opportunities in the IT sector like IT analyst, Computer Programmer, Database Administrator, Mobile Application Developer, CAD Assistant Support Technician, amongst others.

System analysis and designing: Syllabus -- definition of system, characteristics, elements, types of system, system development life cycle; techno economic feasibility; Role of system analyst the process of logical and physical design. Form design: input, output form .System testing, auditing, system maintenance, threats to security, control measures.

System analysis and designing - In business, System Analysis and Design refers to the process of examining a business situation with the intent of improving it through better procedures and methods. System analysis and design relates to shaping organisations, improving performance and achieving objectives for profitability and growth.

Web Technology :-

Syllabus -- Internet basic -introduction to HTML, tags -list- creating table - linking document frames - graphic to HTML document - style sheet style - sheet basic - add style to document - creating style sheet rules - style sheet properties - font - text - list - colourandbackground - box - displayproperties.

Introduction to Java Script - advantage of Java Script - JavaScript in syntax - data type variable - array - operator and expression - looping construction - function - dialogue box. JavaScript document object model - introduction - object in HTML - event handling - window object document object browser object - form object - navigator object - screen object - built in object - user defined object - cookies.

Web Technology:- The Web is a service that operates over the Internet, just as email does. According to Microsoft, web technologies include the following: Mark-up languages, such as HTML, CSS, XML, CGI, and HTTP (Front-end or Client-side technologies) Programming languages and technologies that help create applications for the web.

COURSE OUTCOME OF BCOM (CAV)-1st YEAR

B Com Vocational course with Computer Science is a 3-year bachelor's degree course that provides students with an in-depth understanding of computer programming, applications, software development along with business management. This course is mainly for students who have an aptitude for computer programming and an interest in commerce. The subjects taught in both the semesters of the course along with its benefits to students are described as follows:

- 1. Business data Processing and PC software The objective of this subject is to make students learn Word processing and Spreadsheets software which is a very helpful tool widely used in home, office and schools, to organize, manage and present information, data and figures. It includes Word, to create, polish, and share documents; Excel, to analyze and visualize data spreadsheets are frequently the go to tool for collecting and organizing data, which is among the simplest of its uses. This subject is continued in semester 2 with additional knowledge in presentation software and Desktop Publishing elps in enhancing the appearance of all produced documents, minimized the production cost, easy customization of all kinds of projects, and also in a way to manage the presentation as well as its content.
- 2. Computer Fundamentals and Logical Organization It can be described as the learning or studying some basic functions of computers starting from their origin to the modern day. Study of basic computer types to their characteristics, advantages, and disadvantages are included in the Learning of fundamentals of computers. Before Shifting to advance computer knowledge it is highly recommended to be aware of this topic thoroughly as it would make you more confident and comfortable while acquiring more advanced computer skills. This subject is taught in first semester of the course.
- E Commerce- Ecommerce is a booming sector. Sales and revenue in the market have grown year-on-year for over a decade. Even amid the uncertainty of COVID-19, online shopping is a robust industry. That makes it an excellent one in which to launch a career.
- 4. Programming in C- If you are looking to develop your skills as a software developer or a computer programmer, the wide variety of programming languages that exist may overwhelm you and make you wonder which one you should invest in learning. Though different languages are useful for writing specific types of code, the C programming language is perhaps the most universal and beneficial. In fact, learning C could help you develop skills that will benefit you throughout your professional career by simplifying the process of learning additional programming languages in the future.

At the end of three year B.Com programme with specialization in Computer Application, the students will be able to understand the application of business Knowledge in both theoretical and practical aspects. Doing B Com in computer applications has a good scope in future as IT sector is a vast growing sector in the country. They can work in a variety of fields ranging from advertising, software, e-business, and management related jobs. Outcome a: an ability to apply knowledge of computing and mathematics appropriate to the discipline, Outcome b: an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution, Outcome c: an ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.

GOVERNMENT PG COLLEGE AMBALA CANTT

Department of Computer Science

COURSE OUTCOMES (BACHELOR OF COMPUTER SCIENCE)

Course Name: Computer and Programming Fundamentals

Course Code: BCA-111

Class/Sem: BCA/1ST SEM

Course Outcomes:

After the successful completion of the course students will be able to:

- Understand basic concepts of computers hardware and software.
- Understand the organization and operation of computer processors, peripheral devices, memory etc.
- Course describes concepts of structure programming, program design etc.
- Be familiar with different types of operating system.
- Understand the concept of algorithms.
- Write the various searching and sorting algorithms like binary search, linear search, bubble sort, selection, merge sort etc.

Course Name: Windows and PC software

Course Code: BCA-112

Class/Sem: BCA 1st Sem

Objectives of windows and PC software

- Give students an in-depth understanding of why computers are essential components in business. education and society.
- · Introduce the fundamentals of computing devices and reinforce computer vocabulary, particularly with respect to personal use of computer hardware and software, the Internet, networking and mobile computing.
- Provide hands-on use of Microsoft Office applications Word, Excel and PowerPoint.
- Completion of the assignments will result in MS Office applications knowledge and skills.
- · Provide foundational or "computer literacy" curriculum that prepares students for life-long fearning of computer concepts and skills.

- Solve common business problems using appropriate Information Technology applications and systems.
- Identify categories of programs, system software and applications. Organize and work with files and folders.

Course Name: Mathematics foundation-I

Course Code: BCA-113

Class/Sem: BCA 1th Sem

CO1: Mathematical Foundation-I for BCA 1st sem

The students will be able to understand sets, subsets and operations on set,

Able to solve problems related to permutation and combinations.

Get knowledge on Boolean algera.

Able to understand the concept of continuity and differentiability of functions.

Acquire knowledge on differential equations, ordinary differential equations, and it's application to geometry.

Course Name: Logical Organization of Computers - I

Course Code: BCA-114 Class/Sem: BCA 1st Sem

Course Outcomes:

- It helps the students to understand binary number system as well as different coding schemes
- Most importantly students understand the concept of logic Gates and their application and further designing of various circuits diagram.
- Students very well aware about karnaugh map which help to solved complexity of Sum of Product & Product of Sum equations.
- Understand the combinational circuits
- Understand the multiplexer and demultiplexer.

Course Name: Communicative English

Course Code: BCA-115 Class/Sem: BCA 1st Sem

Course Outcomes:

The students on completing this course are expected to:

- Demonstrate critical and innovative thinking.
- Display competence in oral, written, and visual communication.
- Apply communication theories.
- Show an understanding of opportunities in the field of communication.
- Use current technology related to the communication field.
- Respond effectively to cultural communication differences.
- Communicate ethically.
- Demonstrate positive group communication exchanges.

Course Name: Programming in C Course Code: BCA-116 Class/Sem: BCA 1* Sem

Course Outcomes:

- Build their programming skills.
- Be familiar with programming environment with C Program structure.
- 3. Able to declare variables and constants.
- Able to work with inbuilt functions for various input and output operations.
- 5. Understand operators and expressions,
- Able to make use of decision making statements and looping constructs in programs.
- 7. Understand arrays, its declaration and uses.
- 8. Design programs using functions.

Course Name: Advance Programming in C

Course Code: BCA-121

Class/Sem: BCA 2nd Sem

Course Outcomes:

The students on completing this course are expected to:

- Work with textual information-strings.
- Work with inbuilt functions for various input and output operations.
- Implement problem solving skills using pointers.
- Understand and implement structure and union.
- Work efficiently with files.
- Handle possible errors during program execution.
- Be familiar with pre-processors
- Write a program for the given problem using Clanguage.

Course Name: Logical Organization of Computer II
Course Code: BCA-122

Class/Sem: BCA 2nd Semester

Course Outcomes:

- It helps the students to understand binary number system as well as different coding schemes
- Most importantly students understand the concept of logic Gates and their application and further designing of various circuits diagram.
- Students very well aware about karnaugh map which help to solved complexity of Sum of Product & Product of Sum equations.
- This course helps the students to aware of designing of various combinational logic and sequential logic circuits and their different design procedures.
- Finally students get full knowledge of various memory organizations, instructions design and I/O organization.

Course Name: Mathematical Foundation-II

Course Code: BCA-123

Class/Sem: BCA 2nd Sem

CO2: Mathematical Foundation-II for BCA 2nd sem:

The students will understand the concept of propositions and logical operators, Truth table and propositions generated by a set, laws of logics,

Aquire knowledge on Mathematical inductions,

Able to get detailed knowledge of group theory.

Obtained knowledge of Rings Theory.

Come to know about addition and multiplication of matrices, singular and non-singular matrices, Rank of matrix, system of linear equations.

Able to understand the concept of Eigen value and eigen vectors of matrix, calacy hamilton theorem and diagonalization of matrix.

Course Name: Office Automation and Tools

Course Code: BCA-124

Class/Sem: BCA 2nd Sem

Course Outcomes:

- Learn about the importance of desktop publishing.
- Acquire the knowledge about different desktop publishing softwares.
- Learn and practice desktop publishing using PAGEMAKER.
- Create enriched documents such as books, business cards, birthday cards etc using PAGEMAKER
- Learn about the importance and application of Office Automation.
- Work with a word processing system.
- Create quality presentations using PowerPoint Presentation software.

Course Name: Structured System Analysis and Design Course Code: BCA-125

Class and Sem :BCA-I/ Sem II

Course Outcomes:

On completion of the course the student should be able to:

- Explain what systems are and how they are developed.
- Identify and describe the phases of the systems development life cycle.
- Follow the analysis portion of the Systems Development Life Cycle in a disciplined manner.
- Develop and evaluate system requirements.
- Work effectively in a team environment.
- Describe the role and responsibilities of the systems analyst in the development and management of systems.
- Explain the need for and value of a formalized step-by-step approach to the analysis, design, and implementation of computer information systems.
- Use tools and techniques for structure analysis.
- Describe the role and responsibilities of the participants in information systems^o development.
- · Develop a feasibility analysis of a proposed system.
- Analysis the cost benefits for new proposed system.

Course Name: Personality Development

Course Code: BCA-126

Class/Sem: BCA 2nd Sem

Course Outcomes:

- Make use of techniques for self-awareness and self-development.
- Apply the conceptual understanding of communication into everyday practice.
- Understand the importance of teamwork and group discussions skills,
- Develop time management and stress management.
- Apply business etiquette skills effectively an engineer requires.

Course Name: Lab-II Based on BCA-112 and BCA-124 (Practical)

Course Code: BCA-131 Class/Sem: BCA 1st and 2nd Sem

Course Outcomes:

After the successful completion of the course students will be able to:

- Learn about Desktop Publishing.
- Develop enriched documents that will be ready for publishing like books, magazines, newsletter etc.
- Design birthday cards, business cards, logo etc.
- Make power point presentation of their work.
- Use word processing software for making and generating reports.
- Make use of spreadsheet for data handling.
- Learn to work with different MS Office packages.
- Manipulate and control the Windows desktop, files and disks

Course Name: Lab-II Based on BCA-116(Programming in C) & BCA-121(Advanced Programming in C)
(Practical)

Course Code: BCA-132 Class/Sem: BCA 1st and 2nd Sem

Course Outcomes:

- Build their programming skills.
- Able to read, understand and find the execution of programs written in C language.
- Write the C code for a given algorithm.
- Write C programs using Decision making statements, looping constructs.
- Write C programs using arrays, functions, strings, structures and union.
- Implement programs with pointers and use the preprocessors.
- Able to perform file handling and error handling.

Course Name: Object Oriented Programming Using C++

Course Code: BCA-231

Class/Sem: BCA 3rd Sem

Course Outcomes:

The students on completing this course are expected to:

- To learn fundamental principles of developing software like modular and object oriented approach
- To understand the principles of object-oriented programming
- To Develop object-oriented software
- To Develop CUI based User Interface based on classes and objects.
- Describe the vocabulary of object-oriented systems
- Develop an object-oriented system given a specific application case study
- Construct human/systems interfaces
- Demonstrate the elicitation of systems requirements techniques

Course Name: Data structure

Code: BCA-232

Class/Sem: BCA II/Sem III

Course Outcomes:

- To impart the basic concepts of data structures and algorithms.
- To Understand basic concepts about stacks.
- To Understand basic concepts about queues.
- To Understand basic concepts about lists.
- To understanding about writing algorithms and step by step approach in solving problems with the help of fundamental data structures

Course Name: Computer oriented Numerical Method/ Computer Oriented Statistical Methods

Course Code: BCA-236

Class/Sem: BCA 3rd

CO3: Computer -Oriented Numerical 236 3rd Semester:

The students will be able to understand the different numerical methods to solve the linear and quadratic equations and iterative methods.

Able to understand the solution of simultaneous linear equations and ordinary differential equations.

Wil able to solve problems related to Numerical differentiation and integrations, Trapezoidal and Simpson rule.

Course Name: Computer Architecture

Code:BCA-233

Class/Sem: BCA II/Sem III

Course Outcomes:

After the successful completion of the course students will be able to:

- Understand the internal working of Computer.
- Explore different instruction sets and format available.
- Learn about the register transfer language in detail
- Design the different units of computer like arithmetic, logic, shifter etc.
- Learn about memory hierarchy.
- Learn about design of basic computer.

Course Name: Software Enggineering

Course Code:BCA-234

Class/Sem: BCA II/Sem III

Course Outcomes:

- Knowledge of basic SW engineering methods and practices, and their appropriate application.
- Describe software engineering layered technology and Process frame work.
- A general understanding of software process models such as the waterfall and evolutionary models.
- Understanding of software requirements and the SRS documents.
- Understanding of the role of project management including planning, scheduling, risk management, etc.

Course Name: Fundamental of Database Management System

Course Code:BCA-235

Class/Sem: BCA II/Sem III

Course Outcomes:

After the successful completion of the course students will be able to:

- To describe a sound introduction to the discipline of database management systems.
- To give a good formal foundation on the relational model of data and usage of Relational Algebra.
- Explain the basic concepts of relational data model, entity relationship model, relational database designs and relational algebra.
- Design ER Models to represent simple database application scenarios.
- Improve database design by using different models.

Course Name: Advance Data Structure

Course Code: BCA-241

Class/Sem: BCA 4th Sem

Course Outcomes:

- Understand the role of data structure in real life and in industry.
- Understand and remember algorithms and its analysis procedure.
- Design and implement various data structure algorithms.
- Introduce various techniques for representation of the data in the real world.
- Be familiar with advanced data structures such as binary search tree, graphs.
- Be familiar with various searching and sorting algorithms such as binary search, quick sort, merge sort, heap sort.

- Be able to write recursive methods
- Develop applications using data structure algorithms.
- Compute complexity of various algorithms.
- Understand different file types, operations performed on it and their comparisons.
- Understand different file organizations.

Class and Sem :BCA/ Sem IV

Course Name: Advanced Programming using C++

Course Code : BCA-242

Course Outcomes:

On completion of the course the student should be able to:

- To understand how C++ improves C with object-oriented features.
- To learn the syntax and semantics of the C++ programming language.
- To learn how to design C++ classes for code reuse.
- To learn how to overload functions and operators in C++.
- To learn how containment and inheritance promote code reuse in C++.
- To learn how inheritance and virtual functions implement dynamic binding with polymorphism.
- To learn how to design and implement generic classes with C++ templates.
- To learn how to use exception handling in C++ programs.

Course Name: E-commerce

Course Code: BCA-243

Class/Sem: BCA 4th Semester

Course Outcomes:

- · Demonstrate an understanding of the foundations and importance of E-commerce
- Demonstrate an understanding of retailing in E-commerce by:
- analyzing branding and pricing strategies,
- using and determining the effectiveness of market research
- assessing the effects of disintermediation.
- Analyze the impact of E-commerce on business models and strategy

- Describe Internet trading relationships including Business to Consumer, Business-to-Business, Intra-organizational.
- Describe the infrastructure for E-commerce
- Describe the key features of Internet, Intranets and Extranets and explain how they relate to each other.
- Discuss legal issues and privacy in E-Commerce
- Assess electronic payment systems
- Recognize and discuss global E-commerce issues

Course Name: Relational Database Management System

Course Code: BCA-244

Class/Sem: BCA-4[™] sem

Course Outcomes:

- Understand relational model and its concepts
- Understand and implement codd's rules for relational model
- Implement relational algebra operators
- Understand and solve queries using relational and tuple calculus
- Understand functional dependencies
- Decompose tables to more stable structures using normal forms(1NF,2NF,3NF)
- Understand data types and operators in SQL
- Implement DDL,DML and DCL commands of SQL
- Understand and implement views, and indexes
- Understand architecture and basics of PL/SQL and SQL* PLUS
- Understand cursor, triggers in PL/SQL
- Implement programming using PL/SQL

Course Name: Computer oriented Numerical Method/ Computer Oriented Statistical Methods

Course Code: BCA-245

Class/Sem: 4th Sem

CO4: Elements of Computer Oriented Statistical Methods for BCA 4th sem:-

The students are able to understand basic concepts of statistics and measure of dispersion.

Aquire knowledge on the topic frequency distribution, moments and moments generating function

Students able to understand the probability distributions: normal, binomial, Poisson distribution, correlation and regression,

Able to apply z-test, chi square test, curve fitting and Anova method.

Course Name: Management Information system Course Code: BCA-246

Class/Sem: BCA 4th Semester

Course Outcomes:

- Understand the leadership role of Management Information Systems in achieving business competitive advantage through informed decision making.
- Analyze and synthesize business inform
- ation and systems to facilitate evaluation of strategic alternatives.
- Effectively communicate strategic alternatives to facilitate decision making.
- Articulate the fundamental principles of information systems analysis and design.
- Demonstrate the skills necessary to conduct a requirements determination study.
- Analyze how information system impacts a firm.
- Interpret how to use information systems to solve business problems.

Course Name: Lab – I Based on BCA-231 & BCA-242 Course Code: BCA-251

Class/Sem: BCA 4th Sem

Course Outcomes:

The students on completing this course are expected to:

- Build software based on object oriented approach
- Understand the concept of abstraction
- Implement Polymorphism
- Understand the concept of reusability of code
- Achieve Dynamic binding of code
- Build their own header files
- Learn to access the restricted private members using friend functions.

Course Name: lab-II based on BCA 232 and BCA 242

Course Code: BCA-252

Class/Sem: BCA 4th sem

Course Outcomes:

The students on completing this course are expected to:

- Be able to implement the concept of array, stack and Queue.
- Design and implement various data structure algorithms.
- Be able to Implement the advanced data structures such as binary search tree, graphs.
- Implementation of various searching and sorting algorithms such as binary search, quick sort, merge sort, heap sort.
- Be able to write recursive methods.
 - Understand different file organizations.

Course Name: Web designing Fundamental

Couse Code: BCA-351

Class/Sem: BCA III/Sem V

Course Outcomes:

- Understand the role of web engineering in real life and also in industry.
- Web Engineering lifecycle and fine grained software evolution.
- Learn the role of information architect in building the information architecture of today's web.

Be familiar with current Web technologies.

- Be familiar with Web application development software tools and environments currently available on the market.
- Implement web application using HTML, CSS.

Course Name: Operating system

Course Code: BCA-352

Class/Sem: Vth SEM

Course Outcomes:

After the successful completion of the course students will be able to:

- understand basic concepts and types of operating system
- Understand the Process management.
- · Do the various problems related to CPU scheduling.
- Be familiar with concept of deadlock and its various recovery techniques:
- Be familiar with concept of memory management which consist the concept of swapping, segmentation, demand paging, virtual memory etc.
- · Solve the various page replacement problems.
- · Be familiar with file organization.

Course Name: Artificial Intelligence Course Code: BCA-353 Class/Sem:BCA 5th sem

Course Outcomes:

- Learn different techniques used in AI for problem solving,
- Represent a natural language description as statements in logic
- Deduct new sentences by applying inference rules.
- Design a fuzzy expert system for a given problem.
- Represent a problem in terms of probabilistic statements
- Apply a suitable learning algorithm to solve the problem.
- Apply Bayes rule and product rule for inference
- Perform probabilistic inference using Bayes net.

Course Name: Computer Networks Course Code: BCA-354 Class/Sem:BCA 5th sem

Course Outcomes:

After completing this course the student must demonstrate the knowledge and ability to:

- Independently understand basic computer network technology.
- Understand and explain Data Communications System and its components.
- Identify the different types of network topologies and protocols.
- Enumerate the layers' of the OSI model and TCP/IP. Explain the function(s) of each layer.
- Identify the different types of network devices and their functions within a network
- Understand and building the skills of routing and congestion mechanisms.
- Familiarity with the basic protocols of computer networks, and how they can be used to assist in network design and implementation.

Course Name: Programming using VB Couse Code:BCA-355

Class/Sem: BCA III/Sem V

Course Outcomes:

The student will demonstrate knowledge of visual programming by:

- Creating a visual program to solve a problem.
- · Interpreting a series of instructions used in a visual program.
- Identifying the basic structures of program (sequence, decision, and repetition).
- Describing the different program development tools.
- · Creating the design for a program using the development tools.
- Modifying the design for an existing program.
- Describing the difference between a console program and a Graphical User Interface (GUI).
- Creating a console program.

Course Name: Multimedia Tools Couse Code:BCA-356

Class/Sem: BCA III/Sem V

Course Outcomes:

After the successful completion of the course students will be able to:

- To learn and understand technical aspect of Multimedia Systems.
- To understand the standards available for different audio, video and text applications.
- To Design and develop various Multimedia Systems applicable in real time.
- To learn various multimedia authoring systems.
- To understand various networking aspects used for multimedia applications.
- To develop multimedia application and analyze the performance of the same.

Course Name: Web Designing Using Advanced Tools

Course Code: BCA-361

Class/Sem: BCA 6th Semester

Course Outcomes:

- Understand and use Javascript
- · Familiarize with VBscript
- Understand and use ASP
- Understand and use PHP
- Understand and use CSS
- Use FrontPage
- Use XML

Course Name: Operating System II

Course Code: BCA-362

Class/Sem: BCA 6th Semester

Course Outcomes:

After the successful completion of the course students will be able to:

- Distinguish between different types of Operating Systems.
- Understand the concept of process synchronization.
- Learn about different algorithms to solve the problem of process synchronization.
- Explore the disk structure and directory structure.
- Analyse and distinguish different disk scheduling algorithms.
- Understand about simple commands used in the Linux operating system.
- Implement process synchronization in the Linux operating system.
- Understand about shell programming in Linux operating systems.

Course Name: Computer Graphics

Course Code: BCA-363

Class/Sem: BCA 6th Semester

Course Outcomes:

- Understand the concept of computer Graphics
- Understand and distinguish between different types of displays.
- Learn about point plotting techniques.
- Understand two dimensional transformation.
- Understand two dimensional viewing and projections
- Learn about three dimensional graphics like transformation, viewing and projections.

Course Name: Internet technology objectives

Course Code: BCA-364

Class/Sem: BCA 6th Semester

Course Outcomes:

After the successful completion of the course students will be able to:

- Define terms related to the Internet.
- Describe how the Internet is changing the world.
- Understand how computers are connected to the Internet.
- Demonstrate the ability to use the World Wide Web.
- Understand and apply Internet Etiquette.
- Demonstrate an understanding of and the ability to use electronic mail.
- Understand the principles of Internet services such as Listserv Mailing Lists, Usenet Newsgroups, and Instant Messaging.
- Find information on the Internet.
- Understand and use common types of files found on the internet.
- Demonstrate the ability to download a variety of resources from the internet.
- Understand methods for citing Internet resources.
- Understand societal issues and emerging technologies.

Course Name: Advance Programming with Visual Basic Course Code: BCA-365

Class/Sem: BCA 6th Semester

Course Outcomes:

- Design, formulate, and construct software applications with VB.
- Develop programs that retrieve input from a file as opposed to input only provided by the user.
- Develop an Event Planning based program on problem description so as to define the processing that is to occur based on specific events.
- Develop a Graphical User Interface (GUI) based on problem description.
- To Design forms with database connectivity.
- To design and understand menu bar based applications.
- To enhance the User Interface design using Graphics.
- To understand and explore the modern controls available on different interfaces.

Course Name: Programming in Core Java Course Code: BCA-366

Class and Sem :BCA-III/ Sem VI

Course Outcomes:

On completion of the course the student should be able to:

- Knowledge of the structure and model of the Java programming language, (knowledge)
- Use the Java programming (anguage for various programming technologies (understanding)
- Develop software in the Java programming language, (application)
- Evaluate user requirements for software functionality required to decide whether the Java programming language can meet user requirements (analysis)
- Propose the use of certain technologies by implementing them in the Java programming language to solve the given problem (synthesis)

Course Name: lab I based on BCA 351 & 361

Couse Code: BCA-371

Class/Sem: BCA III/Sem V & VI

Course Outcomes:

The students on completing this course are expected to:

- Understand the role of web engineering in real life and also in industry.
- Be familiar with current Web technologies.
- Design simple web pages.
- Implement web application using HTML, CSS.
- Implement different tags available in HTML.
- Add and set properties of image to a web page.
- Make lists in HTML
- Implement static web pages.
- use Javascript and VBscript
- Understand and use ASP
- Understand and use PHP
- Understand and use CSS

Use FrontPage and XML

Course Name: Lab-II Based on BCA 355 and BCA 365

Course Code: BCA-372

Class/Sem: BCA 5th & 6th Sem

Course Outcomes:

- Differentiate between CUI and GUI Applications
- Understand the concepts of Integrated Development Environment
- Design and debug graphical interfaces
- Understand the concept of event handling
- Analyze program requirements.
- Design/develop programs with GUI interfaces which are responsive to Events.
- Code programs and develop interfaces using Visual Basic.
- Perform tests, resolve defects and revise existing code.
- To build menu based applications
- To build applications containing advance controls like TreeView, Tab Strip etc
- To understand the concept of ADO, DAO & RDO based Database connectivity.
- To understand the concept of SDI & MDI Forms to implement Excel like multithreading

Department of Chemistry Government PG College, Ambala Cantt Course Outcomes – Chemistry

B. Sc. 1" Year (1" Semester)
Paper-I (CH-101) Inorganic Chemistry (Theory)

Course Outcomes:

CO1: States the postulates of quantum mechanics and Schrodinger equation to explain the structure of hydrogen atom.

CO2: To study and explain the Radial and angular nodes and their significance in describing shapes of s,p and d orbitals.

CO3: Know about Spin quantum numbers and magnetic quantum numbers and their significance.

CO4: Have knowledge about electronic configuration, Effective nuclear charge and slater's rule.

CO5: To learn about lonic bonding and energy consideration in ionic bonding to Explain Lattice energy and solvation energy.

CO6: To study Born-Lande equation and Born-Haber cycle, polarizing power and polarizability.

CO7: To apply VSEPR theory in explaining shapes of some inorganic molecules and ions.

CO8: Know about Rules of LCAO method, Bonding and antibonding molecular orbitals.

B. Sc. 1st Year (1st Semester)
Paper-II (CH-102) Physical Chemistry (Theory)

Course Outcomes:

CO1: To learn about Role of temperature and pressure to establish the state of gases and describe the Concept of critical temperature, pressure and volume of real gases

CO2: To understand the Maxwell distribution law and various parameters associated with collisions ideal gas molecules

CO3: To study the Physical properties of liquids like surface tension, viscosity and their measurements

CO4: To understand the morphology of crystalline solids and have knowledge about various types of symmetries present in different solids

CO5: To be able to describe X-rays diffraction and Bragg's law

CO6: To have knowledge about solutions and colligative properties and their application in determining molar mass of solute.

B. Sc. 1" Year (1" Semester)
Paper-III (CH-103) Organic Chemistry (Theory)

Course Outcomes:

CO1: Have sound knowledge of the basic organic chemistry like electron displacement effects with suitable examples.

CO2: Get information about the types of structural and stereoisomers, optical isomerism, and different nomenclature like D/L, RScis/trans, E/Z etc. of various organic compounds.

CO3: Learn nomenclature of various type of alkanes and cycloalkanes, preparation and their chemical reactions.

CO4: Sound knowledge of alkenes, alkynes, dienes and their chemical reactions.

Paper-IV (CH-104) Inorganic Chemistry (Theory)

Course Outcomes:

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CO1: To know the concept and able to explain types and effect of hydrogen bonding and van der Waals forces on properties of substances.

CO2: To learn about the various theories of metallic bonding with reference to conductors, insulators and semiconductors and their applications.

CO3: To know about the diagonal relationship among S- block elements and about hydrides, oxides, hydroxides and halides of S-block elements.

CO4: Learn about chemistry of noble gases with special reference to xenon.

CO5 To know about the physical and chemical properties of p-block elements.

CO6: Have knowledge about the boron family elements their structure, preparation and properties of diborane and borazine.

CO7: To learn about the elements of carbon and nitrogen family and concept of catenation, carbides and fluorocarbons.

CO8: To know about the elements of oxygen family and have knowledge about the chemical properties of oxides of sulphur.

> B. Sc. 1st Year (2nd Semester) Paper-V (CH-105) Physical Chemistry (Theory)

Course Outcomes:

CO1: To have the knowledge about the concepts of rates of chemical reactions and its applications in derivation of reactions of various orders and half-life

CO2: To be able to explain about the physical and magnetic properties associated with various molecular substances

CO3: To have information about conductance and its applications to deduce various parameters related to electrolytic solutions, to know about pH and conductometric titrations

CO4: Know about Concept of basics of cells their EMF determination by use of Nernst equation and thermodynamic properties

> B. Sc. 1st Year (2nd Semester) Paper-VI (CH-106) Organic Chemistry (Theory)

Course Outcomes:

CO1: Know about Huckel's rule of aromaticity and various methods of preparation of aromatic Hydrocarbons.

CO2: Get knowledge about the mechanism of SN1 and SN2 reactions and other various chemical reactions of aryl and aryl halides.

CO3: Know about alcohols, phenols, ethers, epoxides and their chemical reactions.

CO4: Knowledge about various methods for the preparation of carboxylic acid, carboxylic derivatives (ester, amide, acid chlorides, anhydrides) and their chemical reactions.

> B. Sc. 1" Year (Annual) Paper-VII (CH-107) Chemistry (Practical)

Course Outcomes:

CO1: To gain knowledge about Preparation of standard solutions used in the lab.

CO2: Know about Redox, iodometric titrations and complexometric titrations.

CO3: To study the concept of surface tension and its determination by various methods.

CO4: To know about viscosity and its measurements by using Ostwald's viscometer.

CO5: To learn about, How to Purify organic compounds by crystallisation (with alcohol and water), sublimation and distillation.

COG: Able to prepare various organic compounds and also their derivatives.

CO7: To study the process of sublimation and crystallization of camphor and phthalic acid.

CO8: Able to analyze qualitatively inorganic cations and anions using paper chromatography.

B. Sc. 2nd Year (3nd Semester) Paper-VIII (CH-201) Inorganic Chemistry (Theory)

Course Outcomes:

CO1; Have good knowledge about d-block elements particularly of transition elements.

CO2: To study the comparison between 3d elements with 4d and 5d elements with reference to lonic radii, oxidation state, magnetic properties and spectral properties some compounds of transition elements.

CO3: To know about position of f block elements in periodic table and their general characteristics.

CO4: To study the occurrence and separation of lanthanides and lanthanide compounds.

CO5: Have knowledge of actinides their existence and general properties.

CO6: To compare the properties of Lanthanides and actinides with transition elements.

CO7: To know about the basic concepts of coordination chemistry like EAN, Werner theory of coordination and isomerism in coordination complexes.

B.Sc. 2rd Year (3rd Semester) Paper-IX (CH-202) Physical Chemistry (Theory)

Course Outcomes:

CO1: To know about the laws and concepts of chemical thermodynamics and their applications in thermochemical calculations.

CO2: To have knowledge about electrolytic concentration cells with and without transference and their EMF calculation, applications of the concept to determine liquid junction potential, pH determination using potentiometry and potentiometric titrations.

CO3: To understand the basic terms related to chemical equilibrium and derive the law thermodynamically, deduce relation between various equilibrium constants and determining partition coefficient of a solvent dissolved in two immiscible solvents.

CO4: To have good knowledge about fundamental concepts of phase equilibrium and their applications in studying one and two-component systems including eutectics

B.Sc. 2nd Year (3nd Semester) Paper-X (CH-203) Organic Chemistry (Theory)

Course Outcomes:

CO1: Have knowledge of various absorption laws (Beer-Lambert law), molar absorptivity, analysis UV spectra and application of UV spectroscopy in structure elucidation.

CO2: Able To describe absorptions of various functional groups and applications of IR spectroscopy.

CO3: To synthesize and know reactions of amines.

CO4: To discuss synthetic application of diazonium salt.

CO5: Know about the preparation of aliphatic, aromatic aldehydes and ketones and various important name reactions of aldehydes and ketones.

CO6: Get knowledge about the acidity of a-hydrogens of diethyl materials, ethyl aceteacetate and the synthesis and Keto-enol tautomerism of ethyl acetoacetate.

B. Sc. 2nd Year (4th Semester) Paper-XI (CH-204) Inorganic Chemistry (Theory)

Course Outcomes:

CO1: To recapitulate the concept of valence bond theory and know the concept of crystal field theory with reference to splitting of d orbitals' in octahedral, tetrahedral and square planar complexes and factors affecting the crystal field parameters.

CO2: To explain the factors responsible for the stability of coordination complexes and various substitution reactions of square planar complexes with reference to trans effect.

CO3: To study the magnetic properties of transition metal complexes and various types of magnetic materials and their magnetic susceptibility.

CO4: To explain the methods for the determination of magnetic susceptibility.

CO5: To apply the magnetic moment data for 3d metal complexes and study the selection rules for the d-d transitions.

CO5: Able to calculate the spectroscopic terms for various metal ions.

CO6: Have knowledge about orgal level diagrams for d1 and d9 electronic states and the electronic spectrum of [Ti(H2O)6]+3complex ion

B. Sc. 2nd Year (4th Semester) Paper-XII (CH-205) Physical Chemistry (Theory)

Course Outcomes:

CO1: To know about dual characteristic of matter and extend this fact to obtain postulates of quantum mechanics and quantum-mechanical operators, apply Schrödinger equation to determine the physical observables for particle in a box.

CO2: To understand the need of statistical mechanics and Maxwell-Boltzmann distribution, partition function and its significance.

CO3: To have sound knowledge about the consequences of interaction of radiation with matter resulting into various types of spectra.

CO4: To be able to solve various numerical problems related to spectroscopy.

B. Sc. 2nd Year (4th Semester) Paper-XIII (CH-206) Organic Chemistry (Theory)

Course Outcomes:

CO1: Get knowledge about the principle of nuclear magnetic resonance and the PMR spectra of

various molecules.

CO2: Brief description of organometallic compounds.

CO3: To have knowledge about classification, structures and important reactions of carbohydrates and amino acids.

CO4: Get knowledge aromatic behaviour and basicity of simple heterocyclic compounds.

B.Sc. 2nd Year (Annual) Paper-XIV (CH-207) Chemistry (Practical)

Course Outcomes:

CO1: To verify the Beer's lambert law using potassium permanganate and potassium dichromate and also quantitation of these analytes.

CO2: To prepare simple coordination complexes viz. Cuprous chloride, tetra-ammine cupric sulphate, chrome alum, potassium trioxalatochromate(III) and Nickel Hexammine chloride.

CO3: Able to find out critical solution temperature of phenol water system.

CO4: To determine the enthalpy of solution of calcium chloride enthalpy of neutralization and ionization using different combinations of acids and bases.

CO5: To perform hydrolysis of ethyl acetate and find out rate constant of the reaction.

CO6: To identify extra elements present in various solid organic compounds.

CO7: Able to identify functional group present in organic compounds.

CO8: Able to measure melting point, solubility behaviour, pH range, flame testing etc. of organic

CO9: To perform gravimetric analysis and also able to analyze quantitatively copper, nickel and aluminium in the given solution.

> B. Sc. 3rd Year (5th Semester) Paper-XV (CH-301) Inorganic Chemistry (Theory)

Course Outcomes:

CO1: Know about Metal- Ligand Bonding in Transition Metal complexes.

CO2: Know about Thermodynamics and Kinetic Aspects of metal complexes.

CO3: Know about Magnetic properties of Transition metal complexes.

CO4: Have knowledge about electronic spectra of Transition metal complexes.

B. Sc. 3rd Year (5th Semester) Paper-XVI (CH-302) Physical Chemistry (Theory)

Course Outcomes:

CO1: To study the Quantum Mechanics.

CO2: To know about Physical Properties and Molecular Structure

CO3: To have sound knowledge about the concepts of dual nature of matter and its applications to obtain Schrödinger wave equation and angular momentum.

CO4: To know about Spectroscopy, Rotational Spectrum, Vibrational spectrum, Raman Spectrum.

B. Sc. 3rd Year (5th Semester) Paper-XVII (CH-303) Organic Chemistry (Theory)

Course Outcomes:

CO1: To know about NMR spectroscopy

CO2: To study the structure of carbohydrates.

CO3: Introduce the concept of Organometallics

B. Sc. 3rd Year (6th Semester) Paper-XVIII (CH-304) Inorganic Chemistry (Theory)

Course Outcomes:

CO1: To study the Acids and Bases behaviour and HSAB principle

CO2: To know about organometallic chemistry

CO3: To know about the Metal ions present in biological system, classification and Metalloporphyrins.

CO4: To study the Biological role of Na+, K+, Ca+2, Mg+2, Fe+2 ions

CO5: To study Silicones and Phosphazenes

B. Sc. 3rd Year (6th Semester) Paper-XIX (CH-305) Physical Chemistry (Theory)

-Course Outcomes:

CO1: To study the Introduction to statistical mechanics

CO2: To know about Photochemistry

CO3: To know about the Solutions, Dilute Solutions and Colligative Properties

CO4: To study Phase Equilibrium

B. Sc. 3rd Year (6th Semester)

Paper-XX (CH-306) Organic Chemistry (Theory)

Course Outcomes:

CO1: To study the Organic Synthesis via Enolates CO2: To know about Heterocyclic Compounds

CO3: To know about the Amino Acids, Peptides& Proteins

CO4: To study about Synthetic Polymers

B. Sc. 3rd Year (6th Semester) Paper-XXI (CH-307) Chemistry (Practical)

CO1: To analyze the given inorganic mixture qualitatively for various cations and anions present in them.

CO2: Able to determine Rf values.

CO3: Able to perform thin layer chromatography to separate various components present in the Mixture, determination of hardness of water.

CO4: To perform conductometric titrations to find out strength of monobasic acid and also solubility and solubility product of a sparingly soluble salt.

CO5: Able to conduct the potentiometric titrations.

CO6: Can separate the binary liquid mixture using distillation.

Syllabus Outcomes

Today Tourism is the buzz word. It contribution cannot be denied in world economy. It generate huge employment opportunities, therefore it is introduced as a job oriented professional course in first decade of 21° century. Nomenclature of the course is B.T.M. (Bachelors in Tourism Management). Course comprises of 6 semester, in which various aspect of tourism is covered to familiarize the students.

Sr. No.	Paper	Outcome
1.	INTRODUCTION TO TOURISM	The primary purpose of the paper is to acquaint the students about the basic and preliminary knowledge of the terms, concepts, systems and trends in tourism. It will form the first step to move forward to interact with the advanced knowledge pertaining to tourism.
2.	Business Environment for Tourism	The primary objectives of this course are to acquaint the students emerging global trends in tourism business environment.
3.	TOURISM PRODUCTS OF INDIA (NATURAL)	Tourism begins with the motivation to visit attractions at destinations. The attractions may be natural or manmade (cultural). The natural attraction such as mountains, hills, forests with wild animals, coastal areas and islands are attracting all. India is seventh largest country with rich diversity of natural tourist resources. It is very necessary for the students of tourism to know about these tourist products. This course will help the students to give an insight about the rich natural tourist products of India.
4.	TOURISM PRODUCT OF INDIA (CULTURAL)	
5.	GEOGRAPHY OF TOURISM	Geography of Tourism studies the phenomena of tourism over the global space with 'spatial' attention on the place of origin, place of destination & routes through which the travel & tourism takes place. It provides a thorough knowledge about the characteristics of tourist markets

		attractions of destinations & the accessibility of the world with a focus on a few selected countries of world. This course has been simplified with very few case studies & proad information about the continents.
6.	MANAGEMENT	Transport is most important element of travel & tourism business. One cannot think of tourism industry without any mode of transportation. There are several modes of transportation which are relevant in different conditions. The course focuses on different modes of transport and their role in tourism.
7.	DOCUMENTATION	Tourism industry is growing at very fast pace. In India the outbound tourism and inbound tourism are also growing. International tourism involves several types of formalities. The students of tourism should know about such formalities, which are needed in the form of several documents. In this course the students learn about required documents in foreign travels.
8.	HARYANA TOURISM	The course aims at providing a comprehensive overview on Haryana Tourism: elucidating State tourist resource potential, Tourism infrastructure and tourist trends over the years. It critically examiners exiting tourism planning and policy, framework and reviews the performance of Haryana in the context of both domestic and international.
9.	TOURISM IN INDIA	India is one of the emerging economic powers of India. In tourism too India is one of few choicest destinations of the world. India has a great variety of natural and cultural tourist attractions, that's why it is said that India is for all reasons and all seasons. In this course few important and popular tourist destinations are mentioned, so that the students can know about main tourist attractions of given places.
10). HOTEL BUSINESS	Main objective of this paper is to introduce accommodation sector to the students of Tourism. Being a major component of tourism accommodation sector has expanded a lot in itself. This paper touch upon various aspects of accommodation, hotel and hospitality sector.
U	I. HRM IN TOURISM	The primary objectives of this course are to acquaint the students emerging global trends in tourism business environment.
13	Z. COMPUTER APPLICATIONS IN	Computer skills are essential in every modern framework of studies including tourism due to the need to manage fast

	TOURISM	multiplying information and data. The course focuses on the basic software(s) and new terms and technologies while providing an insight in Computing and related concepts.
13.	COMMUNICATION SKILLS AND PERSONALITY DEVELOPMENT	The course introduces learners to the basic communication skills and personality traits requisite in tourism and hospitality industry jobs. The theoretical inputs are designed to be used with practical exercises in the class rooms and daily behavioral corrections.
14.	Principles of Management	To prepare the budding managers in tourism and to provide the students basic knowledge of management and managerial skills.
15.	TOURISM MARKETING	The course familiarizes students with the basic concepts of tourism marketing. The objective is to enable students to develop an understanding of application of these concepts. The themes covered are approaches towards marketing and marketing mix.
16.	AN INTRODUCTION TO TRAVEL AGENCY & TOUR OPERATIONS BUSINESS IN INDIA	The study includes the functions, Regulations for Recognition of Travel Agents, Tour Operators and Excursion Agents. The Role of Sectors like Airline, different Railways Transports is also covered. The learner also be familiarized with the contribution of important Association in these sectors.
17.	IMPACTSOF TOURISM	The development has its own impacts and so in case of tourism. The students shall be given exposure of the patterns of development in tourism mainly in reference to the developed and developing countries. The study of the positive as well as the negative impacts of tourism becomes essential to understand the benefits and lose of tourism development.
18.	ACCOUNTING FOR TOURISM	The enormous changes during the past ten years in 'Tourism Industry' and the technology of information accessing have dramatically affected the environment accounting. Tourism Management, to service in this labile business environment, needs reliable, timely, complete and understandable accounting formation. This course equips the students with counting techniques, Methods and tools for preparation, understanding, analysis and interpretation of financial statements hotel companies.
19.	Sustainable Tourism	Prepare the budding tourism professionals by providing basic knowledge about sustainable tourism related skills.

20.	Entrepreneurship in Tourism	Prepare the budding entrepreneurs in tourism and to provide the students basic Knowledge of entrepreneurship and entrepreneurial skills.
21.	INTERNATIONAL TOURISM	The paper provides a comprehensive view of the tourism trends and patterns at the international level. The trends are to be studied through volume of tourists' arrivals in different regions and their contribution in tourism earnings. The knowledge of the forces and factors responsible for tourism growth is other area of discussion in the paper. Since tourism growth is not uniform in all the regions, the issues like tourism gap or disparities form another key area of knowledge for the students.
22.	ECONOMICS OF TOURISM	Tourism is now recognized as an economic activity of global significance. This complex and multi-faceted industry plays an important role in the economics of many developed and less developed countries. This course gives the macroeconomic picture of tourism's role within national economies using the fundamental concepts learned in introductory economics course.
23.	Adventure tourism	Adventure tourism is a new but popular type of tourism in India. It is very popular among the youth. India has immense potential for most diverse type of adventure activities. Adventure tourisms are basically nature-based activities. India has a large variety of geomorphologic and climatic conditions, so India can be a heaven for those tourists who want risk, excitement and thrill. For BTM students Adventure tourism provides a large scope of employment opportunity. This course helps in understanding the resources potential for adventure tourism in India, existing popular destinations and activities.
24.	TOURIST GUIDING	Tourist escort or guide is one of the essential linkages between tourists and the destination. He is the image maker of the destination/ country. A good escort or guide can make a permanent imprint on the visitors about the place. The students of BTM should know the personality, functions and basic qualifications of a tourist guide and escort so that they can contribute to tourism industry as a tourist escort or a guide if they like, It is a very challenging and interesting job where he meets and interacts with new persons from different parts of the world every day.

25.	Salesmanship in Tourism	The main objective of this course is to acquaint students with the nature of Salesmanship and its application in tourism Industry.
26.	Pilgrimage Tourism	This course helps to give information about the various religion of India, their features and different seats of touristic significance where people go for the sake of pilgrimage like Hinduism, Sikhism, Islam, Christianity, Jainism, Buddhism etc.
27	Communicative English	Tourism business is largely based on English language. In this subject student came to know about different tourism terminologies, difference between American and British English. How to communicate with the various stakeholders of tourism.
28	Tourism Administration of India	In this paper students came to know about the tourism administration system in India and various bodies likes, Ministry of tourism, ITDC, TFCI, HDPB. Various state tourism development corporation responsible for development in that respective state like FTDC, KTDC, RTDC etc. Various tourism policies are also studied

Graduates of the Bachelor of Tourism Management will be able to:

Context of Tourism

- Contextualize tourism within broader cultural, environmental, political and economic dimensions of society.
- Critique tourism practices for their implications locally and globally.

Knowledge of Tourism

- Interpret and evaluate tourism as a phenomenon and as a business system.
- Explain the diverse nature of tourism, including culture and place, global/local perspectives, and experience design and provision.
- · Identify and assess relationships and networks relative to building tourism capacity.

Professional Skills

- Apply relevant technology for the production and management of tourism experiences.
- Plan, lead, organize and control resources for effective and efficient tourism operations.

- Create, apply, and evaluate marketing strategies for tourism destinations and organizations.
- Develop and evaluate tourism policy and planning initiatives.

Ethics and Values

- Demonstrate commitment to ethical practices of tourism.
- Actively engage in the world as global citizens.
- Practice empathy and respect for diversity and multicultural perspectives.
- Apply principles of sustainability to the practice of tourism in the local and global context.

Research

- Acknowledge one or more philosophical perspectives to knowledge creation.
- Evaluate and apply various research methods commonly used in the context of tourism.
- Propose and conduct a research project to inform tourism practice.

Communication

- Select and deploy task-appropriate forms of oral, written, digital, and graphic communication.
- Value and practice active listening, critical thinking, and critical reading.
- Distinguish and produce forms of communication relevant to academia, business, government, and industry.
- Assess, evaluate, and employ appropriate communication tools for discussions within and between teams and members, various audiences, decision-making teams, and corporate communication tasks.

Critical Thinking & Problem Solving

Apply problem solving and critical analysis within diverse contexts.

Leadership & Teamwork

 Work collaboratively in groups, both as a leader and a team member, in diverse environments, learning from and contributing to the learning of others.

Govt PG College, Ambala Cantt

Department of Mass Communication & Journalism

B.A. Mass Communication

PROGRAMME OUTCOMES

On successful completion of the programme, the student will be able to:-

- PO1 Acquire knowledge related to the discipline under study.
- PO2 Communicate and reflect effectively and efficiently on the issues related to the discipline.
- PO3 Exhibit the professional skills and competencies acquired during the Programme of study.
- PO4 Apply the knowledge and skills acquired in planning, organizing, evaluation and decision making.
- PO5 Explore, analyze and provide solutions to the problems related to the discipline and life.
- PO6 Develop exposure to actual working environment leading to employability and entrepreneurship.
- PO7 Exhibit scientific & research capabilities in academic, professional and general life pursuits.
- PO8 Recognize, appreciate and follow ethical issues relating to the discipline and Society

Programme Specific Outcomes (PSOs)

After completing the undergraduate programme, a learner will be able to:

- PSO1 Acquire fundamental knowledge of Mass communication & Journalism and related study areas.
- PSO2 Learn communication and professional skills related to various fields of mass communication.
- PSO3 Become competent enough to undertake professional job as per demands and requirements of Media & Entertainment Industry.
- PSO4 Become ethically committed media professional adhering to the human values and the values of the Indian culture.
- PSO5 Acquire the primary research skills, understand the importance of innovation, entrepreneurship and global vision

Course Outcomes

BAMC Paper-I - Introduction to Communication

Course Objectives: This course is designed to develop understanding of the basic concept and process of communication. Besides elaborating upon basic models the paper highlights the Indian concept of communication. The prime objective is to enhance communication skills by learning and practice.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Understand basic concept of communication including Indian (Bharatiya) concept
- 2. Know about the different levels and types of communication
- 3. Develop understanding of basic models of communication
- 4. Enhance communication skills by practice

BAMC Paper- II - Language & Media (Hindi)

Course Objectives: The Paper is designed to enhance proficiency in Hindi Language. It seeks to develop the basic of Hindi Language through different modules. Each unit will enable the learner to have the communication in Hindi and to share and express ideas and experiences.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- Develop the knowledge of basics of Hindi language.
- 2. Improve vocabulary in Hindi language.
- Inculcate the knowledge of grammar in Hindi language
- Learn correct uses of Hindi language in media writing

BAMC Paper- III - Computer Applications for Mass Media

Course Objectives: This course is designed for theoretical and practical understanding of computer System and its components, functioning and its application software.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- Develop the basic knowledge of computer system.
- 2. Know about the functioning of different parts of computer.
- 3. Understand the basic concept of Internet and computer networks.
- 4. Understand the basics of Application Software.

BAMC Paper- IV - General Awareness and Current Affairs-1

Course Objectives: This course is designed to aware the students about major national and international current issues and to analyze them which will help them to make their own opinion.

Course Learning Outcomes:

After the completion of the course, the students:

- 1. Will write articles, features, news analysis on social issues.
- 2. Will cover election news and will conduct interviews during election campaigns.

- 3. Will cover stories on economic issues, general budget etc.
- 4. Will be aware of different types of problems the country.
- Will be capable to participate in media debates and discussions.

BAMC Paper- V - Personality Development & Communication Skills- I

Course Objectives: The paper is designed to make the students aware about their personality traits and communicating skills and to teach them the techniques to develop their personality

Course Learning Outcomes:

After the completion of the course, the students will be able to:

- 1. Have in-depth knowledge about the personality traits
- To do SWOT analysis
- 3. Enhance public speaking and presentation skills
- 4. Use time mgmt and effectively
- 5. Learn various stress mgmt, meditation and concentration techniques

BAMC Paper- VI - Language and Media (English-1)

Course objectives: The paper is designed to enhance proficiency in English Language. It seeks to develop the basics of English Language through different modules. Each unit will enable and capacitate the learner to have communication competence which is required in the present-day world. The basic knowledge of communication will enable the learners to share and enliven ideas, experience and know-how ubiquitous in the world.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Learn the rhetoric of presentation
- Learn, comment and respond to correspondence.
- 3. Learn the basics of grammar and composition.
- 4. Acquaint with verbal and non-verbal communication

BAMC Paper- VII - Communication & Society

Course objectives: The course is designed to teach the students about the various concepts of society as well as the triangular relationship between media, society and culture.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Understand the various social institutions like class, caste, kinship, marriage
- 2. Understand the impact of media on society and its various units
- 3. Know the responsibilities of media towards society
- 4. Know the various elements of human behaviour

BAMC Paper- VIII – Basics of Mass Communication

Course objectives: This paper broadens the perspective and concept of communication. The paper also makes the students aware about the advantages and limitations of communication.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Understand the effects of Media on the various stakeholders of the society
- 2. Know the various theories and models of communication
- 3. Know the various formats of Media
- Advantages & disadvantages of different forms of Media

BAMC Paper- IX - Introduction to Reporting

Course objectives: The course is designed to impart knowledge about the basics of reporting And to familiarize the students with different types of reporting with a focus to create understanding of specialized reporting.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Understand the basics of reporting
- 2. Familiarize with different types of reporting.
- 3. Develop understanding of specialized reporting.
- 4. Learn ethics and skills of reporting

BAMC Paper- X - Media & Polity

Course objectives: The objective of this paper is to make the students aware about the Indian Constitution, Parliamentary system, Democracy in India and its challenges

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Know the salient features of Indian Constitution
- Know about election system, Lok Sabha and Rajya Sabha
- 3. Know the powers and Functions of Judiciary & Executive
- 4. Know the nature, functions and roles of Union Govt., State Govt. and PRIs

BAMC Paper- XI - Language & Media Hindi-II

Course objectives: The Paper is designed to enhance proficiency in Hindi Language. It seeks to develop the basic of Hindi Language through different modules. Each unit will enable the students to know more about the media writing in hindi language.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- Polish their hindi language skills
- 2. Translate the write-ups proficiently
- 3. Write features, articles, news analysis, writing for various TV and Radio formats
- 4. Write film and book reviews
- 5. Write for new media and social media

BAMC Paper- XII - Basics of Editing

Course objectives: The purpose of this paper is to familiarize the students with the basics of editing, to understand the concept of design and develop basic understanding of newspaper designing software.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Understand the basics of editing.
- 2. Understand the process of editing
- 3. Understand about dummy, design and layout
- Understand usage of newspaper designing software.

BAMC Paper- XIII - Fundamentals of Advertising & Public Relations

Course objectives: This paper attempts to give basic understanding of advertising and public relations, types of advertising and PR agencies and their technical knowhow. The course also deals with the concept of Corporate Social Responsibility.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Define advertising and brand and functions of advertising.
- Describe various elements of an advertisement.
- 3. Utilize knowledge gained to plan and design advertisement campaign.
- 4. Describe role and importance of PR agency
- Describe the functions of PR agency
- 6. Utilize knowledge gained in planning and designing a public relations campaign

BAMC Paper- XIV - Introduction to Photography

Course objectives: This course is designed to make the students aware about the basic concept, history and development of photography with special reference to India. The paper also imparts in-depth knowledge about the various technicalities of photography.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Understand the various types of Photography
- 2. Acquainted with the art of caption writing
- 3. Understand the advanced digital photography
- 4. Display the advanced techniques of exposure.
- 5. Handle the specialized techniques of lighting and composition
- 6. Produce & critique photographs.

BAMC Paper- XV - Introduction to Audio-Visual Media

Course objectives: Objective of this paper is to enrich the technical knowledge of the students about various formats of audio and visual media along with their history, characteristics and importance.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- I. Know the scope of various formats of audio and visual media
- 2. Know the history of Radio & TV
- Know the various phases of development of these media.

BAMC Paper- XVI - Language & Media (English-II)

Course objectives: This course is designed to upgrade the English language skills of the students through different modules such as usage of dictionary and thesaurus, translation, voice analysis.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Verbal and non-verbal communication in professional life.
- 2. Various aspects of body language and English communication.
- 3. How to go for presentations and interviews etc.
- 4. Rules of Translation
- 5. Exercise right pronunciation

BAMC Paper- XVII – New Media

Course objectives: This course is designed to make the students aware about the concept of new media, online journalism writing, editing and designing.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. explain New Media, its origin and evolution and impact on readers, business and society.
- 2. distinguish New Media from print and electronic media.
- 3. identify the milestones of internet journalism in India and worldwide.
- 4.define important terms of digital world.
- 5.explain the role of a New Media Journalist.

BAMC Paper- XVIII - Media Laws & Ethics

Course Objectives: The course is designed to impart knowledge about main features of Indian Constitution. The focus is to teach journalistic ethics, basic Media Laws that a budding professional should know before entering into the media industry.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- 1. Understand The Indian Constitution and its features
- 2. Understand journalistic ethics with reference to regulatory bodies
- 3. Understand laws related to press and electronic media
- 4. Understand laws useful for a journalist

BAMC Paper- XIX - Development Communication

Course Objectives: The paper is designed to develop the understanding of basic concept of development, its evolution and various perspectives. The paper also helps to know the role of govt in the process of development.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- recognize and explain the concept and importance of development
- 2. distinguish between communication and development communication
- 3.describe use of different media in development communication

BAMC Paper- XX - Current Affairs and Media Issues-II

Course Objectives: This course is designed to aware the students about major national and international current issues and to analyze them which will help them to make their own opinion.

Course Learning Outcomes:

After the completion of the course, the students:

- 1. Will write articles, features, news analysis on social issues.
- 2. Will cover election news and will conduct interviews during election campaigns.
- Will cover stories on economic issues, general budget etc.
- Will be aware of different types of problems the country.
- 5. Will be capable to participate in media debates and discussions.

BAMC Paper- XXI – Media Management

Course Objectives: Objective of this paper is to give an insight into the organizational structure and hierarchy of media organization. Students will get to know about the mgmt and ownership patterns of media organization.

Course Learning Outcomes:

After the completion of this course student will be able to-

- Understand micro and macro economics media Industry.
- 2. Explain operation of media business and its managerial aspects.
- Fore see the future challenges in emerging media platforms and importance of technological developments.
- Understand significance of marketing, its concept, scope and new trends.

BAMC Paper- XXII - Basics of Radio Production

Course Objectives: This course is designed to equipped the students with the theoretical knowledge of radio as radio structure, types of radio programmes and script along with practical aspect of radio station.

Course Learning Outcomes:

After the completion of this course student will be able to-

- Radio news and program production and how to practice broadcast journalism
- How to use remote equipment, especially the audio tape recorder, audio consoles, microphones and others.
- 3. The technique of mixing different audio sources
- The techniques of audio tape editing, especially for use in radio news. Newsreel and other radio news and current affairs programs.
- 5. To learn the art of announcing, presenting, news reading and jockeying for radio.
- To prepare radio programs in different formats and style for different audiences.

BAMC Paper- XXIII – Writing for Radio & Television

Course Objectives: Objective of this paper is to enhance the writing skills for various formats of TV and Radio. The paper also gives an insight into the principles of writing.

Course Learning Outcomes:

After the completion of this course student will be able to-

- 1. write Radio news, talks, features, drama and news analysis
- 2. write TV news, documentary, advertisements, short films etc.

BAMC Paper- XXIV - Reporting skills & Practice

Course Objectives: The course is designed to impart knowledge about the basics of reporting And to familiarize the students with different types of reporting with a focus to create understanding of specialized reporting.

Course Learning Outcomes:

After completing the Course, the student will be able to:

- Understand the basics of reporting
- 2. Familiarize with different types of reporting.
- Develop understanding of specialized reporting.
- 4. Learn ethics and skills of reporting

BAMC Paper- XXV - Current Affairs and Media Issues-III

Course Objectives: This course is designed to aware the students about major national and international current issues and to analyze them which will help them to make their own opinion.

Course Learning Outcomes:

After the completion of the course, the students:

- 1. Will write articles, features, news analysis on social issues.
- 2. Will cover election news and will conduct interviews during election campaigns.

- Will cover stories on economic issues, general budget etc.
- Will be aware of different types of problems the country.
- Will be capable to participate in media debates and discussions.

BAMC Paper- XXVI - Print Production

Course Objectives: The course is designed to teach the aesthetics of composition and development of print media. Students will go through the layout designing and basic principles of layout making and visual language.

Course Learning Outcomes:

After the completion of the course, the students:

- 1. will learn the various tools of layout designing.
- will be able to work with softwares like quark express, In-design, desktop publishing
- 3. will be able to work with photoshop.

BAMC Paper- XXVII - Television Production

Course Objectives: This paper attempts to make the students aware about the various production stages of television.

Course Learning Outcomes:

After the completion of the course, the students:

- will learn different production stages of Television simultaneously.
- 2. Have knowledge of work flow through pre-production, production and post production stages.
- 3. it will lay the foundation for work culture in high competitive setup and get acquainted with tools and techniques required to envisage the expectations.

BAMC Paper- XXVIII - Research Methodology

Course Objectives: This paper is designed to describe the relationship between mass communication, journalism &research, explain the process, concepts and techniques of research and infer the impact of research in mass communication

After the completion of this course student will be able to-

- 1. Understand research, types of research, research methods.
- 2. Understand and use qualitative and quantitative methodologies.
- 3. Explain data collection techniques and data presentation
- 4. Understand the importance and usages of data journalism in different forms of Journalism.

BAMC Paper- XXIX - Personality Development and Presentation Skills

Course Objectives: The paper is designed to make the students aware about their personality traits and communicating skills and to teach them the techniques to develop their personality and other skills.

Course Learning Outcomes:

After the completion of the course, the students will be able to:

1. Have in-depth knowledge about the personality traits

- 2. To do SWOT analysis
- 3. Enhance public speaking and presentation skills
- 4. Use time mgmt and effectively
- 5. Learn various stress mgmt, meditation and concentration techniques

BAMC Paper- XXX – Current Affairs and Media Issues-IV

Course Objectives: This course is designed to aware the students about major national and international current issues and to analyze them which will help them to make their own opinion.

Course Learning Outcomes:

After the completion of the course, the students:

- 1. Will write articles, features, news analysis on social issues.
- 2. Will cover election news and will conduct interviews during election campaigns.
- 3. Will cover stories on economic issues, general budget etc.
- 4. Will be aware of different types of problems the country.
- 5. Will be capable to participate in media debates and discussions.

Program Outcomes of M.Sc. (Geography)

Geography is a unique course of study. It is a different field of study in both the physical sciences and social studies. It is different from other courses in terms of its nature and scope, its approaches and methodology of study, its orientation and perspectives towards society, economy and environmental issues. Geography enables us to understand basic and fundamental concepts, processes and implications on the scale of the society-economy-environmental relationships. Hence, Geography may certainly contribute in decision making in the planning processes right from macro to micro levels. The role of geography as a course or field of study has been increased from traditional to modern areas such as regional development and planning, town and country planning, land uses planning, recourses management, weather prediction and climate change, applications of remote sensing and geographical remote sensing etc.

Program Specific Outcomes

On completion of the M.Sc. (Geography), students will gain knowledge & skill and will able to work as:

- Govt Department: A geographer can avail job opportunities in government departments (like planning and developmental commissions, forestry, environmental, and disaster management departments etc), travel agencies, manufacturing firms, text book and map publishers, media agencies etc.
- Cartographer: Many people choose to work as a cartographer who is a person with extensive knowledge about maps and is involved in making maps, charts, globes, and models of Earth and other planets.
- Surveyor: Many others with a degree in geography also opt to work as a surveyor.
- 4. GPS Surveyors: In recent days even the fields of GIS as well as Remote Sensing are providing job opportunities to people with the educational background in geography and related specialisations.
- 5. GIS and Remote Sensing Fields: Geography as a career provides multiple job options. For example, Digitizers in GIS company or Project manager in Private or Public sector or GIS specialist in City governments, county agencies and other

government agencies and private groups are often in need of experienced GIS professionals.

- Drafter: He/she associate closely with engineers and architectures. It involves
 planning, housing and development projects in terms of their location and
 utilization.
- Government employer: Central government agencies employ geographers for mapping, intelligence work and remote sensing interpretation. State and local governments employ geographers on planning and development commissions.
- Urban and regional planner: Concerned with planning, housing and Development projects with respect to their location and utilization of available land-space.
- Climatologist: Agencies viz. National Weather Service, news media, the Weather Channel and other government entities occasionally need climatologist.
- Transportation manager: The regional transit authorities or shipping, logistics and transportation companies requires in transportation geography.
- Researcher: Many Government and non-government institutes along with research centres offers several career options for qualified geographers with numerous specializations.
- Teacher/Professor: The college teachers, school teachers and university teacher. Depending upon the experience and degrees obtained
- 13. Demographer: In government and research organizations.
- Government officer: Geographical Survey of India/State and Central government provides job opportunities.
- 15. Geography is a scoring subject in UPSC and other competitive examinations.

Course Outcomes of Geography

After completing this first course on M.Sc. Geography, GEOG-101 Climatology the students will be able to understand and answer on the topics of meaning, elements and classification of weather and climate, origin, composition and structure of atmosphere, solar radiation, heat budget and temperature distribution of earth, Atmospheric pressure and its distribution pattern, General circulation and planetary winds, Walker circulation- ENSO and La Nina, origin and mechanism of monsoons and jet streams, Atmospheric Moisture humidity, evaporation, condensation, Dynamics and types of precipitation, Stability and instability of atmosphere, air masses and fronts, Weather systems: Extra tropical and tropical cyclones, Bases of climatic classification by Koeppen, Trewartha and Thornthwaite, Causes and consequences of Climatic change- Evidences and explanations, Global warming and its impacts.

After completing this course on M.Sc. Geography, GEOG-102 Geography of India the students will be able to understand and answer on the topics of Major terrain elements of India and their role in shaping physical landscapes of India, Drainage systems of India and their functional significance, Regional and seasonal variations in climate and climate regions of India., Soil and vegetation types of India- their distribution, characteristics and conservation., Agriculture: Characteristics of Indian agriculture, agricultural development in India since independence, problems of Indian agriculture., Irrigation development in India, environmental impacts of irrigation development projects with special reference to Bhakra Nangal and Indira Gandhi Canal., Production and distribution of following minerals and power resources., Minerals: Iron ore, mica, manganese, bauxite., Power Resources: coal, petroleum, hydropower., Minerals and power resources- The status of their use and need for conservation., Production and distribution of (a) iron and steel. (b) cotton textile (c) automobile industry, Major industrial regions of India and their characteristics., Patterns of domestic and international trade., Major exports and imports of India's trade and balance of payment.

After completing this course on M.Sc. Geography, GEOG-103
Economic Geography the students will be able to understand and answer on the topics of Definition, nature, scope and approaches of economic geography, Relationship of economic geography with economics and other branches of social sciences., World Economies: bases of classification, patterns and characteristics of developed and developing economies of the world., World production and distribution of energy resources: coal and petroleum, World production and distribution of mineral resources: iron-ore and bauxite., Network structure and economic activities, impact of transport on economic activities, Edward Ullman's

spatial interaction model, Basic concepts in location problems, location models of Weber, Christaller and Losch, Concept of economic growth and development, globalization and pattern of economic development., Recent trends in pattern of international trade., Emergence of a new global economy – transnational integration and its spatial outcomes., Major regional trade blocks of the world, free trade initiatives (GATT, UNCTAD, WTO).

After completing this course on M.Sc. Geography, GEOG-104
Statistical Methods in Geography the students will be able to understand and
answer on the topics of Descriptive Statistics: Histograms and Graphs, Measures
of Central Tendency: mean, median, mode. Partitioned values: Quartiles and
deciles. Comparing the mean, median and mode, Measures of Dispersion:
Absolute measures: Range, Quartile Deviation, Mean Deviation, Standard
Deviation. Relative measure of dispersion: coefficient of variation, Normal curve
as a probability distribution: Its characteristics and area under curve, Measure of
inequality: (i) Location quotient (ii) Lorenz curve., Sampling: Theory of sampling,
Methods of sampling, Sampling distribution and Chance errors in sampling.,
Bivariate Analysis: Scatter diagram, correlation analysis,

Spearman's rank correlation and Karl Pearson's correlation coefficient. Test of significance., Simple Linear Regression Model: properties of least square estimate. Coefficient of determination, Residuals and their mapping, Basics of multivariate analysis: Correlation matrix, partial and multiple correlation.

After completing this course on M.Sc. Geography, GEOG-105 Cartographic Methods in Geography(Practical), the students will be able to understand and answer Distribution of Climate data representation by diagrams and maps, Line and bar graph,m Poly graph, Rainfall deviation diagram, Climograph (Taylor and Foster's), Hythergraph, Isopleth, Wind rose diagram, Diagrams: Types and properties of diagrams representing socio-economic data:, One dimensional diagram - Bar diagram: Simple bar, multiple bar, comparative bar, Two dimensional diagram- pie diagram proportional circle, rectangle, square., Three dimensional diagram- Sphere, cube, curbsi, Distribution maps- Dot method, Choropleth — monovariate and bivariate, Miscellaneous diagrams and graphs, Trend graph, Age and Sex pyramid, Flow diagram, cartogram and accessibility maps.

After completing this course on M.Sc. Geography, GEOG-201 Geomorphology the students will be able to understand and answer on the topics of Introduction to geomorphology as a science: definition, nature, scope and recent Developments, Fundamental concepts:, (i) Geological structure and landforms, (ii) Uniformitarianism, (iii) Multicycle and polygenetic evolution of landscape, (iv) Frequency concept of geomorphic processes, (v) Climatogenetic geomorphology, Continental drift theory and its basic considerations; Plate tectonics-meaning and concept, margins and boundaries, plate motion and cycle; Tectonic activities along boundaries and distribution of plates, Hill slope-definition and forms of slope, geomorphic processes and slope forms, slope evolution: down wearing, parallel retreat and slope replacement models, Weathering: Causes; types of weathering: physical, chemical and biological, Mass movement, causes, classifications and types of mass movements- slow and rapid mass movements, Geomorphic processes and resulting land forms:, (i) Fluvial, (ii) Glacial, (iii) Aeolian, (iv) Karst Applied geomorphology: Meaning and concept, role of geomorphology in environmental management of the following:, (i) Accelerated erosion and sedimentation, (ii) Construction of large dams (iii) Urban geomorphology

After completing this course on M.Sc. Geography, GEOG-202
Population Geography the students will be able to understand and answer on the topics of Nature and scope of population geography, Methodological problems in population geography Sources of population data, quality and reliability of data, problems of mapping Population data, Concepts, determinants and world patterns of the following attributes of population: (i) Distribution and density, (ii) Vital rates: birth and death rates, (iii) Migration (including laws of migration), (iv) Growth, (v) Age and Sex Composition, (vi) Occupation, (vii) Literacy Demographic Transition Model, Population Resource Regions, Theories of population: Malthus, Ricardo and Marx, Population policy of India, Comparative study of population problems and policies of developed and less developed countries, Population and Environment: Implications for the future

After completing this course on M.Sc. Geography, GEOG-203 Regional Development and Planning (with Special Reference to India) the students will be able to understand and answer on the topics of Regional Development: Concept of Space and Region, Typology of Regions, Planning Regions; planning regions of India and their characteristics, Theories of Regional Development: Theory of Polarized Development, F. Perroux Model, Hirschman Theory, Myrdal Theory; Theory of Development from below by J. Friedman, Ecological Theory of Sustainable Development Development and Regional Disparities in India since Independence, (i) Disparities in Agricultural Development, (ii) Disparities in Industrial Development., (iii) Disparities in Human Resource Development in terms of education and health, Approaches to regional planning in India., Planning in India through Five Year Plans; Special Area Development Plans., Metropolitan Planning; Regional Problems and Prospects in India.

Agricultural Geography the students will be able to understand and answer on the topics of Nature, scope and significance of agricultural geography, Origin and dispersal of agriculture., Determinants of agricultural patterns: physical, technological and cultural factors, Concepts of land capability survey, landuse and cropping pattern., Approaches in agricultural regionalization: Von Thunen Model of agricultural land use, crop combination, concentration and diversification., Agro-climatic Zonation: Concept and Indian experience., Bases of identification of agricultural systems by Whitllesey and agricultural typology by Kostrowiki., Measurements of regional imbalances in agricultural productivity., Green revolution: Its impacts and consequences in India., Food production and security in India., Neo-liberalization and Indian agriculture, Agriculture and climate change: Impacts and adaptation.

After completing this course on M.Sc. Geography, GEOG-205, Interpretation of Toposheets and Morphometric Analysis (Practical) the students will be able to understand and answer on the topics of Interpretation of toposheets: (a) Physical features and (b) Cultural features., Profile Analysis: Transverse and Longitudinal, a) Serial Profiles, b) Superimposed Profiles, c) Composite Profiles, d) Projected Profiles, e) Longitudinal or valley Thalweg Profile., Linear Aspects of streams:, a) Relationship between stream order and stream Number, b) Relationship between stream order and Average stream length, 3. Areal Aspects of streams, a) Drainage Frequenc, b) Drainage Texture/Density, Relief Aspect of Streams, a) Area Height Curve, b) Altimetric frequency curve, c) Hypsographic Curve, d) Hypsometric Integral Curve, e) Clinographic or clinometric curve Slope Analysis, a) Wentworth's Method of Average Slope, b) G. H. Smith's Method of Relative Relief.

Geography and Ecosystem the students will be able to understand and answer on the topics of Concept of Ecosystem; Types, components and function of ecosystem, Energy flow in ecosystem: food chain, food web, trophic levels, ecological production and, ecological pyramids, Biogeochemical cycles: Hydrological, carbon, oxygen and nitrogen cycles, Biome: Scheme of Classification: factors affecting the distribution of biomes;, a. Tropical evergreen rain forest biome, b. Savana biome, c. Monsoon biome, d. Temperate biome, e. Marine biome, Ecosystem approach and its relevance in geography, Manenvironment relationship: Classification of resources; use and ecological

imbalance with reference to soils, forests and energy resources, Biodiversity and conservation: preservation and conservation of ecosystem through resource management, Problems of pollution: concept of air, water, and noise pollution, Environment legislation: The Stockholm Conference, the Earth Summit, Kyoto Protocol and Copenhagen Conference, Environmental laws in India (the Wild Life Act, Water Act, Forest Act, Environment Protection Act and National Environment Tribunal Act).

After completing this course on M.Sc. Geography, GEOG-302 (A) Field Methods in Geography (Socio-economic) (Theory) the students will be able to understand and answer on the topics of Significance of Field work in Geography, Identification of Research Problem and Formulation of Research Design., Types and Sources of Data, Preparation of Questionnaires, Sample Design, Collection of socio-economic data., Retrieval and Analysis of Data, Format of Report Writing.

After completing this course on M.Sc. Geography, GEOG-302 (B) Project Report based on Field Survey the students will be able to understand and write a project report based on field survey which shall be duly supervised by the teacher, Scheme of Evaluation:, Report writing-25 marks, Viva voce on Report-15 marks.

After completing this course on M.Sc. Geography, GEOG- 303 (i) Urban Geography the students will be able to understand and answer on the topics of Urban Geography: nature, scope and concepts, Origin and evolution of towns and factors of urban growth, Economic base of cities: concept and employment ratio, Functional classification of cities: concepts and scheme of classification, Rural Urban Fringe: structural characteristics and its development, City and region: concepts of influence and dominance, methods of delimitation of area of influence and area of dominance, Urban morphology and landuse structure: city core, commercial, industrial and residential areas, Models of city structure: concentric zone model by E.W.Burgess, sector model by Homer Hoyt and multiple nuclei model by Harris and Ullman Central place theory of Christaller and Losch, Rank size rule and Law of primate city, Social area analysis.

After completing this course on M.Sc. Geography, GEOG- 304 (i) Political Geography the students will be able to understand and answer on the topics of Definition, nature and scope of political geography, approaches: the functional approach and the unified field theory, State, nation and nation State,

Geographic elements of the state; physical, human, economic, administrative and circulatory systems, Unitary, federal and regional state, Distinction between frontiers and boundaries, demarcation of boundaries, classification and functions of boundaries, Land locked states: advantages and disadvantages, Core areas and capitals, their types and classification, Global strategic views: Mahan and Sea power; Mackinder and Heartland; Spykman and Rimland Servasky and Air power, The developing laws of the sea; geopolitical significance of Indian Ocean, Political geography of India with special reference to water disputes and riparian claims, Kashmir

Problem and Indo-Pak relations.

After completing this course on M.Sc. Geography, GEOG- 304 (iv) Geography and Disaster Management the students will be able to understand and answer on the topics of Definition, nature and classification of disasters, Geography and disasters: major disasters of world, disaster profile of India, Tectonic Disasters: Volcanoes, Earthquakes, Tsunamis, Landslides, Hydrological Disasters: Floods and Droughts, Climatic Disasters: Cyclones, Heavy Precipitation, Human Induced Disasters: Epidemics, Industrial and Transport Disasters; Wars and Terrorism induced Disasters Vulnerability to Disasters and Affecting Factors, Planning for Disaster Mitigation and Preparedness, Mitigation Measures of Disasters, Post Disaster Recovery and Rehabilitation, Impacts of Disaster on Society and Economy, Remote Sensing and GIS Applications in Disaster Prevention and Monitoring.

After completing this course on M.Sc. Geography, GEOG- 304 (v) Biogeography the students will be able to understand and answer on the topics of Nature, scope and significance of biogeography, Basic ecological principles: Bioenergy cycle in territorial ecosystem; energy budget of the earth; trophic levels and food web, Origin of fauna and flora: Major gene centres; domestication of plants and animals and their disposal, agents and roots, Distribution of plant life on the earth and its relation to soil, climate and human activities, Geographical distribution of animal life on the earth and its relation to vegetation types, climate and human activities, Communities-Nature of communities and ecosystems: biodiversities; human induced communities change; habitat decay and conservation of biotic resources, Industrial effluent and its effect on fresh water and marine biology, Environmental hazards: Ecological consequences, human perception and adjustment with respect to flood, drought and earthquake, Bio-Reserves in India, National forest and wild life policy of India.

After completing this course on M.Sc. Geography, GEOG- 305 (A), Introduction to Remote Sensing (Theory) the students will be able to understand and answer on the topics of completing this course on M.Sc. Geography, the students will be able to understand and answer on the topics of

Fundamentals: Remote Sensing, definition and scope, EMR characteristics, Interaction with matter, remote sensing regions and bands, types of remote sensing, Aerial Photographs: aerial photos, types and scale, resolution, geometric properties of single aerial photos, stereoscopy, stereoscopic parallax, relief displacement, Satellite Imagery: General orbital characteristics of remote sensing satellites, general characteristics of remote sensing sensors, characteristics of Indian remote sensing satellite and raw Remote Sensing data, Interpretation and Application: Elements of image interpretation, image processing techniques: Visual and Digital. Applications in resource mapping and monitoring

After completing this course on M.Sc. Geography, of GEOG- 305 (B), Introduction to Remote Sensing (Practical) the students will be able to understand and answer on the topics of Identification of Flight Line, Scale of Photographs, Determination of height of objects from single vertical photographs, Identification of objects and features with stereoscope, Preparation of Thematic maps on landuse/land cover, Georeferencing of satellite imagery in image processing software, Image to image rectification, Creating subset, Merging images of various resolution, Making false colour composite

After completing this course on M.Sc. Geography, GEOG- 401 Geographical Thought the students will be able to understand and answer on the topics of Classification of knowledge, Nature of Geography and its place among sciences. Nature of Geographic knowledge during ancient (Greek and Roman) and medieval (Arab) periods, Foundation of Modern Geography-contributions of Varenius, Kant, Humboldt and Ritter, Emergence of Geography as a study of (i) physical features (ii) chorology (iii) landscapes, Concepts and dualism in Geography: Environmental Determinism and Possibilism, Areal Differentiation: Physical vs Human Geography, and Systematic vs Regional Geography, Revolution-Emergence of theoretical geography Quantitative Explanations in Geography- Laws, theories, models, inductive & deductive logic, Behavioral and Humanistic Perspectives in Geography Social Relevance in Geography- Welfare, Radical and Feminist Perspectives, Postmodernism and Geography.

After completing this course on M.Sc. Geography, GEOG-402, Hydrology and Oceanography the students will be able to understand and answer on the topics of Definition, nature, scope and historical development of hydrology. Relationship of hydrology with other physical sciences, Hydrological cycle, estimation of global water budget, human impact on hydrological cycle, Rainfall: frequency, intensity and measurement, accuracy of rainfall measurement, determination of average rainfall (Arithmetic mean, Theiesson polygon, isohytel methods), variations in rainfall and world distribution, Sources and measurement of stream flow, hydrograph and its components, analysis of hydrograph, factors affecting the hydrograph shape, methods of hydrograph separation, variations in runoff, rainfall-runoff relationship, Major topographic features of ocean basins, bottom relief of Atlantic, Pacific and Indian oceans, Sources, classification and distribution of ocean deposits, corals-origin, types and conditions for development, Theories of the origin of coral reefs (Subsidence and standstill), Origin, causes, types and effects of the ocean currents, currents of the Atlantic, Pacific and Indian oceans, Oceanic temperature: distribution and causes of variation, Composition of oceanic water and distribution of salinity.

After completing this course on M.Sc. Geography, GEOG- 403 (i) Regional Geography of India (with special reference to Haryana) the students will be able to understand and answer on the topics of Concept and types of regions and regionalization, Regional Diversities in India, Critical Review of schemes of regionalization of India: Baker and Stamp, Pithawala, Spate and Learmonth and R L Singh, Macro Regions of India: Himalayas, Indo-Ganga Plains, Indian Peninsula; physical and socio-economic characteristics, Bases of demarcation of Meso Regions in India, Schemes of socio-economic regionalisation: Asok Mitra, P.Sengupta & Galina Sadasyuk, B.K. Roy, Physical and economic diversities in Haryana, i. Relief, Climate, Drainage, Groundwater, Soils and Natural Vegetation, ii.agriculture and its spatial organization, iii. Industry, Transport and Communication, Demographic characteristics and diversities in Haryana, Social diversities in terms of education and health in Haryana, Social region of Haryana.

After completing this course on M.Sc. Geography, GEOG- 404 (v), Urbanization in India, the students will be able to understand and answer on the topics of History of urbanization in India: Ancient, Medieval, Colonial and post independence phases of urbanization, Processes of urbanization: Socio-cultural, political, economic and geographical processes, Patterns of urbanization: settlement structure, level of urbanization, criteria of measurement and spatial settlement structure, level of urbanization, criteria of urbanization in India, Urban patterns of urbanization in India, Recent trends of urbanization in India, Kolkata regions of India; case studies of metropolitan regions of Delhi, Mumbai, Kolkata

and Chennai, Contemporary Urban issues: Urban poverty, slums and urban renewal, urban infrastructure and solid waste management, Role of urbanization in economic and social change, SEZ: Concept, policies and consequences, National urbanization policy.

After completing this course on M.Sc. Geography, GEOG- 405 (A), Fundamental of Geographical Information Systems (Theory), the students will be able to understand and answer on the topics of GIS: concept, definition and development, Hardware and software requirements for GIS environment, Data for GIS: (i) Spatial data and their sources (ii) Non—spatial data and their sources; (iii) data structure: vector and raster, Data Base Management System; Sources of errors in GIS database, Map, scale and map projection: Need of projection, spherical coordinate system and properties, Integration of Remote Sensing data into GIS and its application in resource mapping, urban management and real time mapping, Current issues in GIS.

After completing this course on M.Sc. Geography, GEOG- 405 (B) Fundamental of Geographical Information Systems (Practical) the students will be able to understand and answer on the topics of Practical Exercises: Georeferencing, Creation of Geo-data base and shape file, On screen digitization/vectorisation of spatial data in the form of 3 layers: polygon, polyline and Point, Adding attributes to these layers and statistical calculations, Displaying attribute data on map by various methods, Preparing layout and printing of theme map.

HoD, Geography Govt. Post Gradaute College Ambala Cantt

Course Outcomes (COs) of BA Geography

Semester-I Course Code: GEO-101 Course Name: Geography of India

Course Outcomes (COs):

GEO-101.1: Provides understanding about the physical structure of India.

GEO-101.2: Enrichment of understanding about the human resource endowment.

GEO-101.3: Acquaintance with geographical distribution of major resources.

GEO-101.4: Enhancement of knowledge about spatial distribution of industries, transport and

Semester-I Course Code: GEO-102 Course Name: Maps and scales (Practical)

Course outcomes (COs):

GEO-102.1: Knowledge about basics of cartography and types of maps.

GEO-102.2: Skill acquisition for understanding and construction of different types of map scales.

GEO-102.3: Ability to measure the distances and areas on maps.

GEO-102.4: Skill about enlargement and reduction of maps.

Semester-II Course Code: GEO-103 Course Name: Physical Geography-I

Course outcomes (COs):

GEO-103.1: Provides knowledge about the basics of physical geography and Geological time scale.

GEO-103.2: Enrichment of knowledge about tectonic activities and isostasy.

GEO-103.3: Enhancement of knowledge about processes controlling weathering and mass movement

GEO-103.4: Provides ability to understand the concepts, processes and patterns of erosion.

Semester-II Course Code: GEO-104

Course Name: Representation of Physical Features (Practical)

Course outcomes (COs):

GEO-104.1: Knowledge about different types of topographical sheets/maps.

GEO-104.2: Provides understanding about methods of relief representation.

GEO-104.3: Enhancement of skills of topographical feature by contours,

GEO-104.4: Knowledge and skill of drawing of landform profiles.

Semester-III Course Code: GEO-201 Course Name: Physical Geography-II

Course outcomes (COs):

GEO-201.1: Provides knowledge about the basics of Weather & Climate, Atmosphere and Insolation &

GEO-201.2: Enrichment of knowledge about atmospheric circulation and humidity.

GEO-201.3: Augmentation of knowledge about weather disturbances and climatic classification & climatic change.

GEO-201.4: Familiarization with the oceanic floor and circulation.

Semester-III Course Code: GEO-202

Course Name: Representation of Climatic Data (Practical)

Course outcomes (COs):

GEO-202.1: Capability of measurement of climatic data.

GEO-202.2: Ability to represent the temperature and rainfall data.

GEO-202.3: Development of skill to read and interpret the weather maps.

GEO-202.4: Acquaintance with skills of chain and tape survey.

Semester-IV Course Code: GEO-203 Course Name: Human Geography

Course outcomes (COs):

GEO-203.1: Provides knowledge about the fundamentals of human geography, man-environment relationship and human races.

GEO-203.2: Enrichment of knowledge about distribution of races & tribes in the world and distribution, utilization & conservation of resources.

GEO-203.3: Provides awareness about the basic concepts of population and population theories.

GEO-203.4: Familiarization with different types of human settlements and impact of population on resources.

Semester-IV Course Code: GEO-204 Course Name: Map Projections (Practical)

Course outcomes (COs):

GEO-204.1: Acquaintance with nature and significance of projections system.

GEO-204.2: Augmentation of skills to make cylindrical and conical projections.

GEO-204.3: Capability to construct zenithal and world map projections.

GEO-204.4: Enrichment of surveying skills using plane table.

Semester-V Course Code: GEO-301 Course Name: Economic Geography

Course outcomes (COs):

GEO-301.1: Provides knowledge about the fundamental concepts of economic geography and classification of economic activities.

GEO-301.2: Acquisition of knowledge about resources and their conservation.

GEO-301.3: Enrichment of knowledge about distribution of crops, minerals and energy resources.

GEO-301.4: Acquaintance with global industries, transport, communication and trade.

Semester-V Course Code: GEO-302 Course Name: Distribution Maps and Diagrams (Practical)

Course outcomes (COs):

GEO-302.1: Knowledge about fundamentals of thematic maps and its types. GEO-302.2: Skill acquisition for construction of qualitative distribution maps.

GEO-302.3: Ability to construct quantitative thematic maps. GEO-302.4: Capability to carry out prismatic compass survey.

Semester-VI Course Code: GEO-303 Course Name: Introduction to Remote Sensing, GIS & Quantitative Methods

Course outcomes (COs):

GEO-303.1: Acquaintance with basics of aerial photographs and their interpretation. GEO-303.2: Knowledge about fundamental of remote sensing and its applications.

GEO-303.3: Knowledge about basics of Geographical Information System and its application in various fields of geography.

GEO-303.4: Development of capability to understand the basics of statistics and Capability to comprehend the methods of central tendencies and dispersion.

Semester-VI Course Code: GEO-304

Course Name: Introduction to Remote Sensing and Field Survey Report (Practical)

Course outcomes (COs):

GEO-304.1: Familiarization with the skill of measurements on aerial photographs.

GEO-304.2: Development of art of visualizing 3-D surface on photographs with the help of Stereoscope.

GEO-304.3: Capability to read and interpret physical and cultural features on photographs.

GEO-304.4: Ability to extract features from satellite imageries.

GEO-304.5: Development of skills about conducting Socio-economic Survey and Report Writing.

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बी.ए. (हिन्दी अनिवार्य) 2021-22 बी. टी. एम. Code-102

सेमस्टर-1 HT-21

(क) विद्यार्थियों ने भवितकालीन तथा रीतिकालीन कवियों व उनकी रवनाओं एवं भाषाशैली के बारे विस्तार ज्ञान प्राप्त किया।

(ख) उन्होंने हिन्दी साहित्य के आरम्भिक काल, आदिकाल या वीरमाधा काल के नामकरण, परिस्थितियों, प्रवृत्तियों एवं प्रमुख कवियों व उनकी रचनाओं को भली भीति समझा।

(ग) उन्होंने हिन्दी साहित्य के इतिहास की काल-विभाजन व लेखन परम्परा को समझा।

(घ) विद्यार्थियों ने साहित्य व काव्य की परिभाषा, काव्य-गुण शब्द-शक्ति, रस, छन्द एवं अलंकार की परिभाषा समझ कर काव्य के विविध अंगों की जानकारी प्राप्त की।

सेमेस्टर-II HT-22

- (क) विद्यार्थियों ने धुवरवामिनी नाटक के माध्यम से नाटक व रंगमंच के तत्वों की जानकारी प्राप्त की।
- (ख) इस नाटक के माध्यम से प्रसाद की नाट्य कला की विशेषताओं को समझा।

(ग) हिन्दी साहित्य के भक्तिकाल के अन्तर्गत सगुण व निर्मुण काव्य की विशेषताओं और प्रमुख कविताओं के विषय में व्यापक जानकारी प्राप्त की।

(घ) उन्होंने बोली, भाषा, मानक भाषा, राजभाषा, राष्ट्रभाषा, मातृ—भाषा और माध्यम भाषा के अर्थ को समझा।

(ड.) विद्यार्थियों की भाषा के प्रति समझ एवं नाटक के प्रति रूचि जागुत हुई।

बी.ए. द्वितीय वर्ष (सेमेस्टर III)HT-23

- विद्यार्थियों ने आधुनिक हिंदी कविता के कवियों तथा उनकी कविताओं से महत्वपूर्ण जानकारी प्राप्त की।
- 2. विद्यार्थियों की कविता में रूचि का विकास हुआ।
- हिंदी साहित्य में रीतिकाल की जानकारी प्राप्त कर उस समय की परिस्थितियों से अवगत हुए।
- विद्यार्थियों ने कम्प्यूटर, ई-मेल, इंटरनेट की शिक्षा से आधुनिक तकनीक को समझा।
- विद्यार्थियों ने अनुवाद को समझ वास्तविक जीवन में इसके महत्व को जाना।

बी.ए. द्वितीय वर्ष (सेमेस्टर V) HT-24

- विद्यार्थियों ने कहानियाँ पढ़कर जीवन में वास्तविकता के साथ जोड़कर सही आचरण सीखा।
- विद्यार्थियों में नैतिकता तथा जीवन -मूल्यों का विकास हुआ।
- हिन्दी साहित्य का विस्तार से ज्ञान प्राप्त किया।
- विद्यार्थियाँ ने परिभाषिक शब्दावली का प्रयोग व महत्व समझा।

- विद्यार्थियों की सुनने समझने की क्षमता का विकास हुआ।
- विद्यार्थियों की कल्पना शक्ति का विकास हुआ।

बी.ए. तृतीय वर्ष (सेमेस्टर V) HT-25

- विद्यार्थियों ने समकालीन हिंदी कविता पाठ्य पुस्तक में समकालीन हिंदी कवियों तथा उनकी कविताओं की महत्त्वपूर्ण, विस्तृत जानकारी प्राप्त कर ज्ञान प्राप्त किया।
- विद्यार्थियों ने आधुनिक काल के विभिन्न कवियों तथा उनकी भाषा-शैली का ज्ञान प्राप्त किया।
- विद्यार्थियों में काव्य के प्रति रूचि विकसित हुई तथा कविता—लेखन में प्रवृत हुए।
- पत्र- लेखन, संक्षेपण तथा पल्लवन की प्रक्रिया की विस्तार से जानकारी प्राप्त कर रचनात्मक लेखन में रूचि जागृत हुई।
- विद्यार्थियों में नैतिकता तथा सामाजिक जीवन-मूल्यों की शिक्षा का विकास हुआ।

बी.ए. तृतीय वर्ष (सेमेस्टर VI) HT-26

- विद्यार्थियों ने हिंदी साहित्य की विविध विधाओं की जानकारी प्राप्त की।
- हरियाणवी लोक साहित्य का गहराई से ज्ञान प्राप्त किया।
- विद्यार्थियों की हिरयाणवी भाषा एंव साहित्य के प्रति रूचि जागृत हुई।
- हिंदी पत्रकारिता के ज्ञान से पत्रकारिता में लगन उत्पन्न हुई।
- विद्यार्थियों ने जीवन की वास्तविकता को जाना।

चतुर्थ सेमेस्टर

- (क) औरंगजेब की आखिरी रात, एकांकी में विद्यार्थियों को इतिहास की जानकारी प्राप्त हुई।
- (ख) लक्ष्मीनारायण लाल, उपन्देनाथ अश्क जो की रचनाओं से समाज में व्याप्त विसंगतियों और विदूपताओं की जानकारी प्राप्त हुई।
- (ग) निबन्ध-लेखन, पत्र-लेखन, पारिभाषिक शब्दावली का ज्ञान प्राप्त हुआ।
- (घ) विद्यार्थियों में नाटकों के प्रति रुझान बढ़ा और संवेदनशील दृष्टिकोण विकास हुआ।

वृतीय सेमेस्टर

- (क) विद्यार्थियों ने मैथिलीशरणगुप्त, जयशंकर प्रसाद सूर्यकान्त त्रिपाठी 'निराला',रामधारीसिहं दिनकर सव्विदानन्द हीरानंद वात्स्यायन अज्ञेय जी की कविताओं का अध्ययन किया और उनमें संकलित सकारात्मक विचारों से प्रेरणा प्राप्त की।
- (ख) पत्र-लेखन एवं पारिभाषिक शब्दावली से सम्बन्धित ज्ञान प्राप्त किया।
- (ग) विद्यार्थियों नें कविताओं के प्रति रूचि उत्पन्न हुई और मानवतावादी दृष्टिकोण का विकास हुआ ।

बी. बी. ए. प्रथम वर्ष Code-105 (H) पाठ्यक्रम परिणाम : हिन्दी अनिवार्य 2021-2022

बी. बी. ए. : प्रथम सेमेस्टर

राजभाषा, केन्द्रीय हिन्दी शिक्षण योजना, पत्र लेखन, अनुवाद, परिभाषिक शब्दावली

- विद्यार्थियों ने राजभाषा हिन्दी की विस्तारपूर्वक जानकारी प्राप्त होती हैं। भाषा क्या है, हिन्दी भाषा के विकास एवं वर्तमान रिधित की जानकारी प्राप्त होती हैं।
- हिन्दी भाषा के विकास में अलग–अलग आयोग किस प्रकार काम करते हैं ; का ज्ञान प्राप्त होता है।
- पत्र लिखना सीखते हैं। सरकारी कार्यालय में पत्र लिखना, भेजना, उत्तर प्राप्त करा एवं कार्रवाई किस प्रकार होती हैं, जानकारी प्राप्त होती हैं।
- अनुवाद क्या हैं, किस प्रकार किया जाता है, अनुवादक के गुणों की जानकारी प्राप्त होती हैं।
- परिभाषिक शब्दावली क्या है, इस के प्रयोग और लाभ का ज्ञान प्राप्त होता हैं।

बी.एस.सी.

सेमेस्टर तृतीय

- विद्यार्थियों ने मैथिलीशरणगुप्त, जयशंकर प्रसाद सूर्यकान्त त्रिपाठी 'निराला',रामधारीसिहं दिनकर सिचदानन्द हीरानंद वात्स्यायन अज्ञेय जी की कविताओं का अध्ययन किया और उनमें संकलित सकारात्मक विचारों से प्रेरणा प्राप्त की।
- पत्र-लेखन एवं पारिभाषिक शब्दावली से सम्बन्धित ज्ञान प्राप्त किया।
- विद्यार्थियों नें कविताओं के प्रति रुचि उत्पन्न हुई और मानवतावादी दृष्टिकोण का विकास हुआ ।

सेमेस्टर चतुर्थ

- औरंगजेब की आखिरी रात, एकांकी में विद्यार्थियों को इतिहास की जानकारी प्राप्त हुई।
- लक्ष्मीनारायण लाल, उपन्देनाथ अश्क जो की रचनाओं से समाज में व्याप्त विसंगतियों और विदूपताओं की जानकारी प्राप्त हुई।
- 3. निबन्ध-लेखन, पत्र-लेखन, पारिभाषिक शब्दावली का ज्ञान प्राप्त हुआ।
- विद्यार्थियों में नाटकों के प्रति रूझान बढा और संवेदनशील दृष्टिकोण विकास हुआ।

एम. ए. हिन्दी-प्रथम वर्ष (प्रथम सन्न)

सेमेस्टर-प्रथम

sa II.,

भाषा विज्ञान एवं हिन्दी भाषा

1. इस पेपर के अध्ययन से विद्यार्थियों ने भाषा की परिभाषा और अभिलक्षण, भाषा व्यवस्था और भाषा और भाषा—व्यवहार; स्वरूप एवं इसके अध्ययन की दिशाओं जैसे वर्णानात्मक, ऐतिहासिक और तुलनात्मक आदि का ज्ञान प्राप्त किया। इसके अलावा हिन्दी साहित्य के अध्ययन में भाषा—विज्ञान के अंगों की उपयोगिता के विषय में जानकारी प्राप्त की।

2. इस पेपर के अन्तर्गत स्वन विज्ञान का स्वरूप और उसकी शाखाएं; वाग्यंत्र और उनके कार्य आदि के विषय में ज्ञान प्राप्त किया। इसके प्रयोग से भाषा को किस प्रकार से सुन्दर रूप प्रदान किया जा सकता हैं। भाषा के उच्चारण में विद्यार्थियों ने सटीक

जानकारी प्राप्त की।

 इस विषय के अन्तर्गत भाषा की ऐतिहासिक एवं भौगोलिक पृष्ठभूमि की जानकारी प्राप्त की। भाषा—परिवारों एवं विश्व में बोली जाने वाली विभिन्न भाषाओं के विषय में जानकारी हासिल की।

4. विद्यार्थियों ने वाक्य विज्ञान एवं अर्थ विज्ञान के बारे में भी ज्ञान प्राप्त किया जिससे

उनमें भाषा के प्रति लगाव एवं जागरूकता पैदा हुई।

सेमेस्टर :प्रथम

हिन्दी साहित्य का इतिहास आदिकाल, भिवतकाल

 साहित्य समाज का दर्पण है, साहित्य से समाज में आने वाले साकारात्मक एवं नाकारात्म परिवर्तन की जानकारी प्राप्त हुई।

2. हम अपने देश-समाज की पूर्ववर्ती महत्वपूर्ण घटनाओं, व्यक्तियों, उन के क्रिया-कलाप जिन का उस समय एवं बाद की राजनीतिक सामाजिक परिस्थितियों, आर्थिक, धार्मिक परिस्थितियों का व्यापक प्रभाव पड़ा हों। जानकारी प्राप्त हुई, अतीत को जानने वर्तमान को समझने एवं भविष्य को सुधारने में सहायक हो सकता हैं।

 आदिकाल में केन्द्रीय सत्ता नहीं थी, इस का लाभ बाहरी आक्रमणकारियों ने उठाया और भारत को लूटा, देश छोटे-छोटे राज्यों में बंटा होने के कारण संगठित शक्ति नहीं थी, भारत धीरे-धीरे गुलाम होता गया, विद्यार्थियों ने सीखा कि संगठित शक्ति

से ही सुरक्षा एवं लाभ होता हैं।

4. भिक्तकाल साहित्य में हमारे भक्त कवियों का जीवन एवं साहित्य प्रेरणादायक है। जब समाज बिखर रहा हो, राजनीति अस्थिर हो तब भिक्त के रास्ते से मार्गहीन शिक्त एवं सत्ता तथा प्रजा का सही गार्गदर्शन हो सकता है। भक्त कवियों ने अपने साहित्य के माध्यम से उस समय गृह—कलेश, जाति—प्रथा, छुआछुत, बाहरी आडम्बरॉ, कुप्रथाओं का विरोध किया और एकता का सन्देश दिया, ईश्वर एक है, हम सब उस एक ही ईश्वर की सन्तान है, हमें मिल जुल कर रहना चाहिए।

सेमेस्टर-प्रथम

आधुनिक गद्य साहित्य

 विद्यार्थियों ने गोदान एवं मैला ऑचल के रचनाकारों को पढकर सामाजिक मूल्यों की शिक्षा प्राप्त की।

2. कथाभूमि में संकलित विभिन्न कहानियों के रचनाकारों और उनकी कहानियों को

सविस्तार समझा।

पाँचों उपन्यासकारों की उपन्यास कला से परिचित हुए।

4. पाँच कहानीकारों की कृतियों की समुचित जानकारी दी गई।

विद्यार्थियों ने कहानी—उपन्यास के उदगम व विकास को सविस्तार समझा।

गोदान उपन्यास के माध्यम से शहरी एवं ग्रामीण जीवन के अन्तर को समझा।

सेमेस्टर-प्रथम

आधुनिक हिन्दी काव्य

(क) विद्यार्थियों ने कानायनी के माध्यम से महाकाव्य, सीन्दर्य–बोध का ज्ञान प्राप्त किया।

(ख) उन्होंने राग-विराग कविता से निराला की जीवन-संघर्ष, भाषा-शैली उनकी प्रतिवादी चेतना और हिन्दी सरोज-स्मृति के माध्यम से हिन्दी शोंक गीत परम्परा का ज्ञान प्राप्त किया। (ग) कुकुरमुत्ता कविता के माध्यम से वर्ग संघर्ष अर्थात् प्रगतिवादी चेतना का ज्ञान प्राप्त किया। राम की शक्ति-पूजा से जीवन-संघर्ष की प्रेरणा प्राप्त की।

(घ) विद्यार्थियों ने पंत जी के प्रकृति-चित्रण, कल्पनाशीलता, सान्दर्य-चेतना, काव्य-भाषा ज्ञान

प्राप्त किया और कविताओं के प्रति उनका रूझान बढ़ा।

सेमेस्टर—प्रथम प्रेमचन्द

(क) गवन उपन्यास के माध्यम से विद्यार्थियों ने जीवन की वास्तविकता की छानबीन एवं नए रास्ते तलाशने के लिए प्रेरणा सीखी हैं।

(ख) उन्होंने सेवासदन उपन्यास के माध्यम से समाज में व्याप्त विसंगतियों एवं समस्याओं के प्रति जागरूक किया। समाज के धर्माचार्यों, मठाधीशों, सुधारकों के आडम्बर, ढोंग, पाखण्ड, चिरत्रहीनता, दहेज प्रथा, वेश्यागमन, घूसखोरी, साम्प्रदायिकता द्वेष आदि विकृतियों के वर्णन से भरा प्रस्तुत उपन्यास आज भी कितना प्रांसिंगक है।

(ग) विद्यार्थियों ने कर्वला नाटक के माध्यम से ऐतिहासिक जानकारी प्राप्त की। नाटक के तत्व

एंव रंगमचीयता सम्बन्धी जानकारी प्राप्त की।

एम. ए. हिन्दी-प्रथम वर्ष (द्वितीय सत्र) सैमेस्टर-2:

भाषा विज्ञान एवं हिन्दी भाषा

(क) इस पेपर के अध्ययन से विद्यार्थियों ने प्राचीन आर्य भाषाओं जैसे वैदिक संस्कृत एवं लौकिक संस्कृत, इनका काल एवं इनके अन्तर्गत लिखी गई पुस्तकें व ग्रन्थों के बारे में ज्ञान प्राप्त किया।

अन्य भाषाओं जैसे पालि, प्राकृत और अपभ्रंश का भी विस्तृत ज्ञान प्राप्त किया। आधुनिक आर्य भाषाओं की जानकारी प्राप्त की। जिससे विद्यार्थियों में हिन्दी भाषा के बारे में रूचि

जागृत हुई।

(ख) इस विषय के अन्तर्गत हिन्दी की उपभाषाएं जैसे पश्चिमी हिन्दी, पूर्वी हिन्दी एवं उनकी बोलियों के बारे में ज्ञान प्राप्त किया।

(ग) हिन्दी के विविध रूपों जैसे –सम्पर्क भाषा, राष्ट्रभाषा, राजभाषा, माध्यम भाषा, संचार–भाषा हिन्दी की संवैधानिक रिथति, हिन्दी में कम्प्यूटर सुविधाएं: आंकड़ा–संसाधान, वर्तनी शोधन आदि की विस्तृत जानकारी प्राप्त हुई।

(घ) हिन्दी भाषा—शिक्षण, स्वरूप एवं उद्देश्य की जानकारी प्राप्त हुई जिससे हिन्दी का

उचित प्रयोग एवं शुद्ध उच्चारण कटने में भदद मिली।

सेमेस्टर :द्वितीय

हिन्दी साहित्य का इतिहास : रीतिकाल एवं आधुनिक काल

1. हमारा वर्तमान समय हमारे अतीत एवं इतिहास से जुड़ा है। हमारा इतिहास हमें सिखाता है कि जो अतीत में गल्ती हुई वो भविष्य में न हो। हिन्दी साहित्य के इतिहास से हमें आश्रयदाताओं के दरबार में रहने वाले साहित्यकारों के लिए स्वंय का राजा ही सब कुछ था, राजा की प्रशंसा, यशोगान, वीरता का गुणवान करना ही उन का प्रमुख उद्देश्य था; कि जानकारी प्राप्त हुई।

2. रीतिकाल का साहित्य हमें उस समय की नारी की दशा के वारे में जानकारी देता है कि नारी को भोगविलास की वस्तु समझा जाता था, नारी की शोचनीय दशा से अवगत करवाता है। लेकिन हमें नारी का सम्मान करना चाहिए, नारी केवल स्त्री ही नहीं मां,

वहन, वेटी, पत्नी भी हैं और सम्मान की अधिकारिणी भी है।

3. परिवर्तन अवश्यभावी है। समय परिवर्तनशील हैं जैसे-जैसे समय बदलता है, समाज और साहित्य में बदलाव आता हैं। आधनिककाल में साहित्य और इतिहास में क्रांतिकारी परिवर्तन आया, साहित्य राजा के राजाश्रय से बाहर निकला और साधारण जनता का साहित्य वना। अतीत से साहित्यकारों ने सीख ली और साधारण जनता की समस्याओं को साहित्य का आधार बना कर उन्हें जागृत करने का प्रयास किया, खतंत्रता संघर्ष

आरम्भ हुआ। इस में भारतेन्द्र का अद्भृत योगदान रहा।

4. यहीं परिवर्तन आगे बढ़ा और साहित्यकारों जो अभिव्यक्ति की रवतंत्रता न होने पर प्रकृति के माध्यम से जनता को जागृत करने का प्रयास किया। मजदूर वर्ग एवं किसान वर्ग की समस्याओं एवं दु:खों की अभिव्यवित कर साहित्य के माध्यम से इस वर्ग को न्याय दिलाने का प्रयास किया गया। अब साहित्य आम आदमी का साहित्य बन गया। काव्य, कहानी, नाटक, उपन्यास का नायक कोई भी गरीब, मजबूर एवं साधारण व्यक्ति बन गया, उस के जीवन संघर्ष की कहानी ही महत्त्वपूर्ण विधा का रूप ले लेती। विद्यार्थियों ने साहित्य से यहीं ज्ञान प्राप्त किया कि साहित्य, समाज का है, साधारण आदमी का है, उन्हें साहित्य से जुड़ें रहना चाहिए।

सेमेस्टर द्वितीय आधुनिक गद्य साहित्य

- 1. चन्द्रगुप्त नाटक के माध्यम से राष्ट्र प्रेम एवं देशभिक्त की भावना जागृत की गई।
- 2. निबन्ध निलय के अन्तर्गत निबन्ध विधा के महत्व एवं कौशल का रचनात्मक प्रयोग किया गया।

विद्यार्थियों ने नाटककारों एवं गद्यकारों की जानकारी प्राप्त की।

- 4. पथ के साथी के माध्यम से संस्मरण विधा एवं विभिन्न साहित्यकारों के जीवन पर प्रकाश डाला गया।
- विद्यार्थियों ने नाटक एवं संस्मरण विधा के अन्तर को सविस्तार समझा।

सेमेस्टर द्वितीय आधुनिक हिन्दी काव्य

(क) विद्यार्थियों ने मुक्तिबोध की कविता 'अंधेरे में' से मानव-मन की जटिलताओं को समझा। इससे उनका मनोविज्ञान के प्रति एक विशेष दृष्टिकोण विकसित हुआ।

(ख) उर्वशी के माध्यम से कामाध्यत्म, सीन्दर्य-चेतना संवाद-कौशल, महाकाव्यत्व,

प्रयोगधर्मिता का ज्ञान प्राप्त किया।

(ग) उन्होंने अज्ञेय की वैयक्तिकता और सामाजिकता, भाषा—शैली एवं प्रयोगधर्मिता का ज्ञान प्राप्त किया। उनमें सामूहिक विकास करने के दृष्टिकोण का विकास हुआ।

(घ) मुक्तिबोध एवं अज्ञेय जी की कविता से विद्यार्थियों में मनोविज्ञान के प्रति रूचि बढी।

सेमेस्टर द्वितीय प्रेमचन्द

(क) कर्मभूमि उपन्यास के माध्यम से विद्यार्थियों को उस समय समाज की राजनीतिक पृष्ठभूमि की जानकारी प्राप्त हुई। उस समय समाज में व्याप्त अछूतोद्धार, शिक्षा, गरीबों के लिए मकानों की समस्या, देश के प्रति कर्त्तव्य, जन-जागृति, कृषक-समस्या के प्रति जागरूक हुए।

(ख) उन्होंने प्रेमचन्द के उपन्यास के माध्यम से समाज की अधिरचना और मनुष्य की

मनोरचना को समझा।

(ग) विद्यार्थियों ने प्रेमचन्द की कहानियों के माध्यम से समाज में व्याप्त विसंगतियों व समस्याओं के यथार्थ पहलुओं पर मंथन किया। इससे उनकी समाज के प्रति जागरूकता बढ़ी।

(घ) उन्होंने निबन्धों के माध्यम से भाषा की प्रौढ़ता और परिमार्जितता को जानकारी

प्राप्त की।

पाठय क्रम परिणाम एम० ए० हिन्दी जुतीय सेमेस्टर

प्राचीन एवं मध्य कालीन काव्य

पेपर-6

- 1 इस विषय को पढ़कर विद्यार्थियों को विद्यापित एवं उनके जीवन के बारे में जानकारी प्राप्त हुई रामवृक्ष बेनीपुरी द्वारा सम्पादित उनकी पदावली के विषय में ज्ञान प्राप्त किया। जिनमें कवि विद्यापित ने श्री कृष्ण एवं राधा के प्रेम के द्वारा अपने आश्रय दाता राजाओं विशेषकर राजा शिवसिहँ एवं उनकी पत्नी रानी लिखमा देवी के प्रेम को चित्रित किया है।
- 2 कबीर एंव तुलसीदास जी के जीवन के विषय में विभिन्न जानकारी प्राप्त की कबीर के दोहों में रहस्यवाद भिक्त भावना साधना विद्रोह एवं समाज दर्शन का ज्ञान प्राप्त किया कबीर के राम और तुलसी के राम में अन्तर जाना कबीर ना हिन्दु ना मुस्लमान विषय पर विस्तृत जानकारी हासिल की।
- 3 महाकवि तुलसीदास द्वारा दिखाए गए राम राज्य भक्ति भावना एवं लोक मंगल की कामना के बारे में पढ़कर अपने जीवन में उदारता प्रेम एवं भक्ति भावना की पूर्ति की और जीवन को आदर्श बनाने की लगन जागृत हुई।

सेमेस्टर तृतीय

पेपर -7

काव्यशास्त्र एवं साहित्यालोचन

- संस्कृत काव्यशस्त्र के अतंर्गत विद्याथियों ने काव्य हेतु, प्रयोजन प्रकार के बारें में ज्ञान प्राप्त किया।
- रस के सिद्धान्त, निष्पति, अंग, साधारणीकरण की अवधारणा अलकारों की मूल स्थापनाएँ तथा वर्गीकरण को सविस्तार समझा।
- ध्विन का स्वरूप सिद्धान्त भेद वक्रोक्ति ओचित्य विषयों के प्रति विद्यार्थियों में रूजान जागृत हुआ।
- लक्षण काव्य परम्परा के कवियों एवं उनकी शिक्षा की सविस्तार विद्यार्थियों की जानकारी दी गई।
- काव्यशास्त्र के प्रति रुचि जागृत हुई।

प्रयोजनमूलक हिन्दी

- भाषा के विभिन्न माध्यमों की जानकारी दी गई।
- संक्षेपण और पल्लवन प्रकिया की जानकारी प्राप्त कर रचनात्मक लेखन में रूचि जागृत हुई।
- कम्पयूटर प्रयोग की जानकारी क्षमता विकसित हुई एवं सभी विधार्थियों ने ई —मेल पता बनाने तथा इटरनैट में विशेष रूचि ली।
- पत्रकारिता के स्वरूप प्रकार की जानकारी प्राप्त हुई।
- सम्पादन के आधार भूत तत्व लेखन में विशेष रुचि ली।
- साक्षात्कार प्रेस प्रबंधन एवं कानून की जानकारी दी।

सेमेस्टर तृतीय

पेपर - 9

भारतीय साहित्य

- विद्यार्थियों ने वर्षा की सुबह कविता के माध्यम से जीवन दृष्टिकोण को समझा इससे उनके मन में जीवन के प्रति सकारात्मक दृष्टिकोण का विकास हुआ।
- भारतीय सिहत्य और भारतीय साहित्य के अध्ययन की समस्याएँ से सम्बन्धित ज्ञान प्राप्त किया।
- 3. बंग्ला और हिन्दी साहित्य का तुलनात्मक अध्ययन बंग्ला वैष्णव काव्य परम्परा और हिन्दी भक्तिकाल बंग्ला —हिन्दी नाथ साहित्य बंग्ला मुस्लिम साहित्य और हिन्दी सूफी काव्य का ज्ञान प्राप्त किया नथी भाषा के साहित्य के प्रति विशेष लगाव एंव दृष्किण विकसित हुआ।
- वंकिमचन्द्र और भारतेन्दु, नजरूल और निराला के माध्यम से तुलनात्मक दृष्टिकोण का विकास हुआ।

सैमेस्टर तृतीय

पेपर 10

सूरदासः सूरसागरः

सूरदास द्वारा रिवत सूरसागर में श्रीकृष्ण की लीलाओं का अध्यन किया गया। विद्यार्थियों ने सूरदास के जीवन से रचनाओं से भिवत के महत्व को समझा। आस्था, भिवत एंव श्रद्धा में अद्भूत शक्ति होती है जो सफलता की ओर ले जाती है। कृष्ण का जीवन एंव लीलाएँ प्रेरणदायक है। उन्होंने अपने जीवन में सदा सत्य का साथ दिया, बुराई का विरोध किया। राधा, कृष्ण एंव गोपियों की लीलाओं से प्रेम का सन्देश दिया। जीवन में हमेशा मुस्कराते

रहना चाहिए। किसी की बात सुनकर धैर्य नहीं खोना चाहिए बन्कि सोच समझ कर बोलना चाहिए एंव निर्णय लेना चाहिए। रिश्ते धैर्य एंव सोच समझ कर निभान चाहिए। प्रेम में समर्पण होना चाहिए, विश्वास के बल पर ही परिवार और रिश्ते निभाए जाने चाहिए। निष्काम कर्म करना चाहिए। मित्रता में त्याग करने के लिए तैयार रहना चाहिए।

प्राचीन एवं मध्य कालीन काव्य

चतुर्थ सेमेस्टर

पेपर-6

- इस सेमेस्टर में विद्यार्थियों ने आचार्य रामचन्द्र शुक्ल द्वारा सम्पादित जायसी ग्रन्थावली से विद्यार्थियों ने सीखा कि जीवन में हंसना—रोना अर्थात सुख—दुःख आते जाते रहते हैं। हमें हर परिस्थिति में धैर्य बनाए रखना चाहिए।
- 2. घनानन्द की कविता पढ़कर भी रीतिकालीन परिरिधतियों की जानकारी प्राप्त की।
- महाकवि सूरदास जीवन से जुड़ी हुई अनेक बातों जैसे उनका जन्म, मृत्यु, व्यक्तित्व एवं युग दार्शनिक चेतना भिवत, भावना, शृंगार वर्णन, वात्सल्य वर्णन कर ज्ञान प्राप्त किया।
- सूरदास द्वारा रचित भ्रमर गीत, प्रकृति चित्रण आदि के विषय में विस्तार से ज्ञान प्राप्त किया ।

सेमेस्टर चतृर्थ

पेपर-7

काव्यशास्त्र एवं साहित्यालोचन

- पाशचात्य काव्यशास्त्र के अन्तर्गत विद्यार्थियों ने प्लेटो के काव्य सिद्धांत अरस्तु के अनुकरण सिद्धांत को सविस्तार समझा।
- विद्यार्थियो में लोनजाइनस उदात्त की अवधारणा तथा ड्राइडन के काव्य सिद्धांत की जानकारी प्राप्त की।
- 3. कल्पना के सिद्धांत और ललित कल्पना के अन्तर को समझा।
- 4. विभिन्न वादों तथा सिद्वातों के प्रति रुझान जागृत हुआ ।
- आधुनिक समीक्षा की विशिष्ट पद्धतियों तथा आधुनिकतावाद पर प्रकाश डाला गया।

सेमेस्टर चतृर्थ

पेपर - 8

प्रयोजनमूलक हिन्दी

- 1. मीडिया लेखन की जनसंचार के विभिन्न माध्यमों की समस्त जानकारी प्राप्त हुई।
- 2. विज्ञापन लेखन फीचर लेखन के माध्यम से रचनात्मक कौशल का विकास हुआ।

 दृश्य - श्रव्य माध्यमों में भाषा की प्रकृति सामगी का सामंजरम साहित्य की विधाओं का दृश्य माध्यमों में रूपांतरण से ज्ञापन प्राप्त किया।

अनुवाद के सिद्धांत स्वरूप क्षेत्र भूमिका के प्रति रूझान जागृत हुआ।

 प्रशासनिक शब्दावली प्रयुक्तियाँ विभाग आदि पत्रों अनुभागों दस्तावेजों के अनुवाद किस प्रकार किए जाएँ उसे बनाने में विशेष रुचि ली।

सेमेस्टर चतृर्थ

पेपर 9

भारतीय साहित्य

 विद्यार्थियों ने अग्निगर्भ उपन्यास के माध्यम से बगांल की राजनीति के बारे में अवगत हुए नक्सलवाद के बारे में जानकारी प्रात्त हुई।

2. घासीराम कोतवाल में नानाफडनवीस के समय का सामाजिक एंव राजनीतिक पतन

को चित्रण की जानकारी प्राप्त हुई।

3. बंगला साहित्य बंगला वैष्णव , साहित्य, विद्यापित मालान्धर बसु, मंगल काव्य,

घासीराम कोतवाल, चैतन्य युग से सम्बन्धित ज्ञान प्राप्त किया।

 चैतन्योतर युग, बंगला गद्य का विकास, उपन्यास, कहानी, नाटक, निबन्ध, उद्भव एवं विकास, आधुनिक बंगला कविता में रविन्द्रनाथ टेगोर का योगदान आदि से सम्बन्धित ज्ञान प्राप्त हुआ।

5. भारतीय साहित्य के माध्यम से विद्यार्थियों ने न केवल हिन्दी साहित्य अपितु अन्य

भाषाओं में चित्रित जीवन - मूल्यों से सम्बन्धित ज्ञान को प्राप्त किया ।

सैमेस्टर चतुर्थ

पेपर 10

सूरदासः सूरसागर

 श्रीकृष्ण का सम्पूर्ण जीवन विद्यार्थियों के लिए शिक्षा का कार्य करता है। श्रीकृष्ण ने मधुरा वाले असुर कंस का संहार किया।

2. कृष्ण के जीवन से सीख मिलती है कि दूसरों की पीड़ा को समझना एवं दूर करने

का प्रयास करना ही मानवता है।

 अमरगीत से प्रेम का सन्देश दिया। किसी से प्रेम करो तो उस के प्रति तन, मन एवं सच्चाई से जुड़े रहो, बड़ा त्याग करना पड़े, करना चाहिए।

4. श्रीकृष्ण ग्वाला थे और प्रगृति से जुड़े रहे। उन्होंने पर्यावरण की रक्षा का सन्देश दिया। पशु पक्षियों से प्रेम करों। मन में किसी प्रकार का भेदभाव किए बिना, सब से प्रेम करना सिखाया।

B.A. (Fine Arts) First Semester (Paper Code AR 21)

		2 Lovern
Paper P. (Presett) History of Indian Art	24 + 6 (Int Assmit)	3 hours
Paper-B (Practical) Section-A Still Life (Practical) Section -B Landscape (practical)	30 30	6 hours (2 session) 6 hours (2 session)
OR Clay Modeling		
Section-C Internal /Sessional works	10	
	Total $94+6 = 100$	

Syllabus & courses of Reading

Paper - A Theory

History of Indian Art

Max. Marks: 24+ 6 (Int Assmnt)

Time: 3 hours

Instructions:

- (i) No. of Questions to be set: 09 (02 Questions from each unit) and Question No. 01 is to be set from all over the Units i.e. short type Questions.
- (ii) No. of Questions to be attempted: 05 .Question No. 01 is compulsory
- (iii) All Questions will be of equal marks (except question No. 1, it will be of 8 marks)

History of Indian Art

UNIT-I

Pre History, Indus Valley, Stupa Barhut, Sanchi,

UNIT-II

Kushan, Gupta Art, Mauryan Art

UNIT - III

Art Appreciation

Definition of Art & scope

Elements of Art, Line, Form, Colour, Space & Contents, Colour Theory, Texture, Tone, Hue, Pigment.

Books recommended:

- 1. Bhartiya Chitra Kala Ka Itihas- Vachaspati Gairola.
- 2. Bartiya Chitrakala Ka Itihas- Avinash Bahadur verma.
- 3. Rupa prada Kala Ke Muladhar- R. A. agrawal and S. K. Sharma
- 4. Bhartiya Murtikala_ Ramanath Mishra.
- 5. Bhartiya Kala- A. L. Srivastava.
- 6. Bhartiya Chitrankan- R. K. Vishwakarma.

Paper-B (Practical)

Section- A : Still Life

Time: 6 Hours (2 sessions)

Max. Marks- 30

Size- 1/2 Imperial

Medium- Water color, Pastel color etc.

Instructions:

- The number of students in a practical group should not exceed to 15.
- The examination should be conducted in two sessions.
- iii. The group of the object should not less then three along with draperies.

Section - B - Landscape Painting

Time: 6 Hours (2 sessions)

Max. Marks- 30

Size- 1/2 Imperial

Medium- Water color, Pastel color, oil color etc.

Instructions:

- The number of students in a practical group should not exceed to 15.
- ii. The examination should be conducted in two sessions.

Or

Clay modeling

Time: 6 Hours (2 sessions)

Max. Marks- 30

Size: 8"x 12",

Medium: Clay

Courses of study:

Study of Fruits, animal, human forms and its independent compositions.

Section -C: Internal/Sessional works

Max. Marks: 10

Number of assignments: 4 in each section and 50 sketches and class attendance.

Course Outcome: The course emphasizes on knowledge of History of Indian sculptures of ancient and medieval periods and emphasis on visual elements of art and involvement in art processes by exploration in basic studies of Drawing, Painting of still objects, nature study and Clay models. It deals with ability to explore the expressive possibilities of Medias with alternative approaches to the making of two and three dimensional images.

B.A. (Fine Arts) Second Semester (Paper code AR 22)

Paper No. Nomer	iclature of the paper	Max. Marks	Time Allowed
Paper-A Theory Paper-B (Practical	History of Indian A -t	24 + 6 (Int Assmnt)	3 hours
Section-A Still Lit Section -B Landsca Or	fe (Prantiant)	30 30	6 hours (2 Sessions) 6 hours (2 Sessions)
Section-C Internal	odeling /Sessional works	10	

Total = 94+6 = 100

Syllabus & courses of Reading

Paper - A Theory

Max. Marks: 24+ 6 (Int Assmnt)

Time: 3 hours

History of Indian Art Instructions:

- (i) No. of Questions to be set: 09 (02 Questions from each unit) and Question No. 01 is to be set from all over the Units i.e. short type Questions.
- (ii) No. of Questions to be attempted: 05 .Question No. 01 is compulsory
- (iii) All Questions will be of equal marks (except question No. 1, it will be of 8 marks)

UNIT-I

Ajanta, Ellora, Elephanta

UNIT-II

Orissan Sculpture, Chandela

UNIT-III

Principal of the Art Appreciation: Balance, Harmony, Rhythm, Perspective

UNIT-IV

Mural- Fresco Buono, Fresco Secco, Mosaic

Cerarmic and Glass, Tempera Mold and Sand Casting

Books recommended:

- 1. Bhartiya Chitra Kala Ka Itihas- Vachaspati Gairola.
- 2. Bartiya Chitrakala Ka Itihas- Avinash Bahadur verma.
- 3. Rupa prada Kala Ke Muladhar- R. A. agrawal and S. K. Sharma
- 4. Bhartiya Murtikala_ Ramanath Mishra,
- Bhartiya Kala- A. L. Srivastava.
- 6. Bhartiya Chitrankan- R. K. Vishwakarma.

Paper-B (Practical)

Section- A : Still Life

Time: 6 Hours (2 sessions)

Max. Marks- 30

Size- 1/2 Imperial

Medium- Water color, Pastel color etc.

Instructions:

The number of students in a practical group should not exceed to 15.

The examination should be conducted in two sessions.

iii. The group of the object should not less then three along with draperies. Section - B - Landscape Painting.

Time: 6 Hours (2 sessions)

Max. Marks- 30

Size- 1/2 Imperial

Medium- Water color, Pastel color, oil color etc.

Instructions:

The number of students in a practical group should not exceed to 15.

ii. The examination should be conducted in two sessions.

Or

Clay modeling

Time: 6 Hours (2 sessions)

Max. Marks- 30

Size: 8"x 12"

Medium: Clay

Courses of study:

Study of Fruits, animal, human forms and its independent compositions.

Section -C: Internal/ Sessional works

Max. Marks- 10

Number of assignments: 4 in each section and 50 sketches and class attendance.

Course Outcome: The course emphasizes on knowledge of History of Indian art and emphasis on visual principles of art and involvement in art processes by exploration in basic studies of Drawing, Painting of still objects, nature study and Clay models. It deals with ability to explore the expressive possibilities of Medias with alternative approaches to the making of two and three dimensional images.

B.A. (Fine Arts) Third Semester (Paper code AR 23)

aper 110.	Nomenclature of the paper	Max. Marks	Time Allowed
Paper-A 1 Paper-B (P	neory History of Indian Art	24 + 6 (Int Assmnt)	3 hours
Section-A	Head study (Practical) Landscape (practical) Or	30 30	6 hours (2 sessions) 6 hours (2 sessions)
	Clay Modeling Internal/Sessional work	10	

Total = 94+6 = 100

Paper-A: History of Indian Art

Max. Marks: 24+ 6 (Int Assmnt)

Time: 3 hours

Instructions:

(i) No. of Questions to be set: 09 (02 Questions from each unit) and Question No. 01 is to be set from all over the Units i.e. short type Questions.

(ii) No. of Questions to be attempted: 05 .Question No. 01 is compulsory

(iii) All Questions will be of equal marks (except question No. 1, it will be of 8 marks)

Course of study:

UNIT-I

Pala, Rashtrakuta, Vijaynagaras

UNIT-II

Khajuraho, Hampi, Tanjavur, Folk Art

UNIT-III

Chitrasutra, Shadanga

UNIT-IV

Rasa, Bhava

Books recommended:

- 1. Bhartiya Chitra Kala Ka Itihas- Vachaspati Gairola.
- 2. Bartiya Chitrakala Ka Itihas- Avinash Bahadur verma.
- 3. Rupa prada Kala Ke Muladhar- R. A. agrawal and S. K. Sharma
- 4. Bhartiya Murtikala_ Ramanath Mishra.
- 5. Bhartiya Kala- A. L. Srivastava,
- 6. Bhartiya Chitrankan- R. K. Vishwakarma.
- 7. Indian Art- Partha Mitter

Paper- B

Section -A: Head study (Practical)

Time: 6 Hours (2 sessions)

Size: 1/2 Imperial

Max. Marks- 30 Medium- pencil, Charcoal, pastels etc.

Instructions:

The number of students in a practical group should not exceed to 15.

ii. The examination should be conducted in two sessions.

Course- Study of Head and bust.

Section-B: Landscape (practical)

Time: 6 Hours (2 sessions)

Max. Marks- 30

Size: 1/2 Imperial

Medium- water color/ oil color/ pastel

Instructions:

The number of students in a practical group should not exceed to 15.

ii. The examination should be conducted in two sessions.

Course- Landscape painting with human/ animal and bird figures.

Or

Clay Modeling.

Time: 6 Hours (2 sessions)

Max. Marks- 30

Size: 10" to 18"

Medium- clay

Instructions:

The number of students in a practical group should not exceed to 15.

ii. The examination should be conducted in two sessions.

Course- Study of Head

Section-C-Internal/Sessional works

Max. Marks- 10

Number of assignments: 4 in each section and 50 sketches and class attendance.

COURSE OUTCOME: The course provides knowledge of History of Indian Art of painting, sculpture and architecture and training in observation of subjective and analytical study of Human head, nature, material and objects. It deals with creation of art forms with media, tools and methods and emphasizes on development of creativity, aesthetic sensitivity, art skills and production of creative artwork.

B.A. (Fine Arts) Fourth Semester (Paper code AR 24)

Paper No.	Nomenclature of the paper	Max. Marks	Time Allowed
Paper- A (Theory) History of Indian Art	24 + 6 (Int Assmnt)	3 hours
Paper-B (P			
Section-A	Head study Practical)	30	6 hours (2 Sessions)
Section -B	Landscape (practical)	30	6 hours (2 Sessions)
	Or		
	Clay Modeling		
Section-C	Internal/Sessional works	10	
	Total =	94+6 = 100	

Paper-A: History of Indian Art

Max. Marks: 24+ 6 (Int Assmnt)

Time: 3 hours

Instructions:

 No. of Questions to be set: 09 (02 Questions from each unit) and Question No. 01 is to be set from all over the Units i.e. short type Questions.

(ii) No. of Questions to be attempted: 05 .Question No. 01 is compulsory

(iii) All Questions will be of equal marks (except question No. 1, it will be of 8 marks)

UNIT-I

Badami cave paintings

Jain paintings

Unit-II

Rajasthani Miniatures: Kishangarh, Bundi, Kota, Mevar, Jaipur

UNIT-III

Mughal: Akabar, Jahangir

UNIT-IV

Pahari- Basohli, Kangara Guler, Chamba

Books recommended:

- 1. Bhartiya Chitra Kala Ka Itihas- Vachaspati Gairola.
- 2. Bartiya Chitrakala Ka Itihas- Avinash Bahadur verma.
- 3. Rupa prada Kala Ke Muladhar- R. A. agrawal and S. K. Sharma
- 4. Bhartiya Murtikala_ Ramanath Mishra.
- 5. Bhartiya Kala- A. L. Srivastava.
- 6. Bhartiya Chitrankan- R. K. Vishwakarma.
- 7. Indian Art- Partha Mitter

Paper- B (Practical)

Section -A: Head study (Practical)

Time: 6 Hours (2 sessions)

Size: 1/2 Imperial

Medium- pencil, Charcoal, pastels etc.

Instructions:

- The number of students in a practical group should not exceed to 15.
- ii. The examination should be conducted in two sessions.

Course- Study of Head and bust.

Section-B: Landscape (practical)

Time: 6 Hours (2 sessions)

Max. Marks- 30

Max. Marks- 30

Size: 1/2 Imperial

Medium- water color/ oil color/ pastel

Instructions:

The number of students in a practical group should not exceed to 15.

ii. The examination should be conducted in two sessions.

Course- Landscape painting with human/ animal and bird figures.

Or

Clay Modeling.

Time: 6 Hours (2 sessions)

Max. Marks- 30

Size: 10" to 18"

Medium- clay

Instructions:

The number of students in a practical group should not exceed to 15.

ii. The examination should be conducted in two sessions.

Course- Study of Head

Section-C - Internal/Sessional work (marks should be sent on each semester) Max. Marks-

Number of assignments: 4 in each section and 50 sketches and class attendance.

COURSE OUTCOME: The course provides knowledge of History of Indian Artmural and miniature painting and emphasizing on the training in observation of subjective and analytical study of Human head, nature, material and objects. It deals with creation of art forms with media, tools and methods and emphasizes on development of creativity, aesthetic sensitivity, art skills and production of creative artwork.

B.A. (Fine Arts) Fifth Semester (Paper code AR 25)

Paper No. Nomenclature of the paper	Max, Marks	Time Allowed
Paper- A (Theory) History of Western Art	24 + 6 (Int Assmnt)	3 hours
Paper-B (Practical)		
Section-A Portrait painting (Practical)	30	6 hours (2 sessions)
Section -B Composition (Practical)	30	6 hours (2 sessions)
Or		
Clay Modeling		
Section-C Internal/Sessional works	10	
T.	t-1 - 0416 - 100	

Total = 94+6 = 100

Paper- A Theory:

History of Western Art

Max. Marks: 24+ 6 (Int Assmnt)

Time: 3 hours

Instructions:

 No. of Questions to be set: 09 (02 Questions from each unit) and Question No. 01 is to be set from all over the Units i.e. short type Questions.

(ii) No. of Questions to be attempted: 05 .Question No. 01 is compulsory

(iii) All Questions will be of equal marks (except question No. 1, it will be of 8 marks)

UNIT-I

Prehistoric Art:-Altamira and Lascaux

UNIT-II

Egyptian Art-Tomb and Pyramid Sculpture and Paintings

UNIT-III

Greek art- four phases of Greek Sculptures

UNIT-IV

Early Christian & Byzantine, Gothic

Books recommended:

- 1. Pashchim ki Kala- Giriraj kishor Agrawal
- 2. Pashchatya kala- BP Kamboj

Paper-B (Practical)

Section -A: Portrait painting (Practical)

Time: 6 Hours (2 sessions) Max. Marks- 30

Size: 1/2 Imperial Medium- Pastel/ oil color etc.

Instructions:

The number of students in a practical group should not exceed to 15.

ii. The examination should be conducted in two sessions.

Section -B: composition (Practical)

Time: 6 Hours (2 sessions) Max. Marks- 30

Size: 1/2 Imperial Medium- water color, pastel/ oil colors.

Instructions:

i. The number of students in a practical group should not exceed to 15.

ii. The examination should be conducted in two sessions.

Or

Clay Modeling

Time: 6 Hours (2 sessions) Max. Marks- 30 Medium- clay.

Size: 10" to 18" Instructions:

i. The number of students in a practical group should not exceed to 15.

ii. The examination should be conducted in two sessions.

Section -C: Internal/ Sessional work Max. Marks- 10

Number of assignments: 4 in each section and 50 sketches and class attendance.

COURSE OUTCOME: The course provides knowledge of History of Western Art with social and historical significance of European sculptures, architectures and paintings. It emphasizes on the training in observation of subjective and analytical study of portraits. It deals with interpretation of nature, material, objects and humans/animals/birds and compositional arrangements with elements of lines and colour mediums.

B.A. (Fine Arts) Sixth Semester (Paper code AR 26)

Paper No.	Nomenclature of the paper	Max. Marks	Time Allowed
Paper-A (Paper-B (I	Theory) History of western Art	24 + 6 (Int Assmnt)	3 hours
Section-A	Portrait painting (Practical)	30	6 hours (2 Sessions)
Section -B	Composition (practical) Or	30	6 hours (2 Sessions)
Section-C	Clay Modeling Internal/ Sessional works	10	
	Total =	94+6 = 100	

Paper- A Theory:

History of Western Art

Max. Marks: 24+ 6 (Int Assmnt)

Time: 3 hours

Instructions:

(i) No. of Questions to be set: 09 (02 Questions from each unit) and Question No. 01 is to be set from all over the Units i.e. short type Questions.

(ii) No. of Questions to be attempted: 05 .Question No. 01 is compulsory

(iii) All Questions will be of equal marks (except question No. 1, it will be of 8 marks)

UNIT-I

Early Renaissance: Giotto, Masaccio, Fra Angelico

Middle Renaissance: Mantegna, Donatello, Piero Della Francesca

UNIT-II

High Renaissance: Leonardo, Michelangelo, Raphael, Titian.

UNIT-III

Mannerism: El Greco, Tintoretto, Pontormo.

UNIT-IV

Baroque: Bernini, Ruben, Rembrandt, Caravaggio, Poussin, Vermeer.

Books recommended:

- 1. Pashchim ki Kala- Giriraj kishor Agrawal
- 2. Pashchatya kala- BP Kamboj

Paper-B (Practical)

Section -A: Portrait painting (Practical)

Time: 6 Hours (2 sessions)

Size: 1/2 Imperial

Max. Marks- 30 Medium- Pastel/ oil color etc.

Instructions:

iii. The number of students in a practical group should not exceed to 15.

iv. The examination should be conducted in two sessions.

Section -B: composition (Practical)

Time: 6 Hours (2 sessions)

Max. Marks- 30

Size: 1/2 Imperial

Medium- water color, pastel/ oil colors.

Instructions:

iii. The number of students in a practical group should not exceed to 15.

iv. The examination should be conducted in two sessions.

Or

Clay Modeling

Size: 10" to 18"

Time: 6 Hours (2 sessions)

Max. Marks-30 Medium- clay.

Instructions:

iii. The number of students in a practical group should not exceed to 15.

iv. The examination should be conducted in two sessions.

Section -C: Internal/ Sessional work

Max. Marks- 10

Number of assignments: 4 in each section and 50 sketches and class attendance.

COURSE OUTCOME: The course provides knowledge of History of Western Art with social and historical significance of European sculptures, architectures and paintings. It emphasizes on the training in observation of subjective and analytical study of portraits. It deals with interpretation of nature, material, objects and humans/animals/birds and compositional arrangements with elements of lines and colour mediums.

- 9. Students learn to write the meaning and contents of prospectus.
- 10. Learn about types of Debentures.

Course Outcomes for M.Com

M.Com I

- Organizational Behavior (MC 101): -
- CO.1 Learn about the evolution approaches and importance of organizational behavior with its criticism.
- CO.2 Students learn to clarify the concept of personality with the help of different theories and its impact on organizational behavior.
- CO.3 They become familiar about perception in detail with its managerial implications.
- CO.4 Learn about learning by basic learning theories with its significance in organizational behavior.
- CO.5 They become familiar about the group dynamics in terms of components, norms, role, status, size and leadership.
- CO.6 They become familiar about the group cohesiveness, determinants, consequences and its relationship with productivity.
- CO.7 Learn about transactional analysis with analysis of self-awareness, ego states, life positions, games, stroking and its benefits.
 - · Company Law (MC 104):-
- CO.1 Learn about history and administration with meaning and types of companies.
- CO.2 They become familiar about the promotion and incorporation of companies.
- CO.3 Clarify the memorandum and articles of association with doctrine of ultra vires and adoption of table-A.
- CO.4 Learn about the Doctrine of indoor management and prospectus.
- CO.5 Learn about the powers of SEBI and liability for misleading statements.
- CO.6 Clarify the share capital issue, allotment and transfer of shares with borrowing powers.
- CO.7 They become familiar about appointment, powers and legal position of directors.
- CO.8 Learn about company meetings in terms of kinds, norms, voting, resolutions and minutes.
- CO.9 Clarify the provisions regarding the reconstruction and amalgamation.
- CO.10 They become familiar about the provisions of prevention of oppression and mismanagement.

- CO.11 Clarify the provisions of winding up of companies.
 - Accounting for Managerial Decisions (MC 105):-
- CO.1 Learn about the management accounting, tools and techniques and installation of management accounting system.
- CO.2 Clarify the management information system, its objectives, methods and need of reporting with installation of reporting system.
- CO.3 They become familiar about the responsibility accounting, responsibility centers and its significance.
- CO.4 Clarify the divisional performance measurement with measures of performance and problem of transfer pricing.
- CO.5 Learn about the budgeting, kinds of budgets, budgetary control and zero based budgeting.
- CO.6 They become familiar about the standard costing, types of standards, setting and revision of standards.
- CO.7 Clarify the concept of variance analysis regarding material, labor and overheads with control of variances.
- CO.8 They become familiar about the concept of marginal costing, comparison with absorption costing and applications of marginal costing.
- CO.9 Learn about the break-even analysis and cost- profit- volume analysis with composite break- even point.
- CO.10 Clarify the contemporary issues in management, accounting and price level adjustment accounting.
- CO.11 Students learn to Clarify value chain analysis and activity based costing.
- CO.12 Learn about the quality costing, target and life cycle costing.
 - Marketing Management (MC 106):
- CO. I Learn about the marketing, its scope, evolution, importance and new perspective of marketing.
- CO. 2 They becomes familiar about the management of marketing mix and marketing environment.
- CO. 3 Students learn to Clarify the marketing information system and marketing research.
- CO. 4 Learn about the consumer behavior with business market analysis and customer relationship management.

- CO. 5 They becomes familiar about the concept of product in relation to product development, product-mix and product life cycle stages.
- CO. 6 Write the concepts of Branding, Packaging, Labeling and Warranty.
- CO. 7 They becomes familiar about the price determination, policies and strategies.
- CO. 8 Learn about the Promotion Programme and types of promotion.
- CO. 9 Students learn to clarify the distribution logistics and supply chain management.
- CO. 10 They becomes familiar about the social, ethical and legal aspects of marketing.
- CO. 11 Students learn to clarify the marketing and information economy with direct and online marketing.

Human Resource Management (MC 201):-

- CO.1 They learn about the concept of Human resource management with its scope, objectives, functions and importance.
- CO.2 Clarify the global HRM and HRM in dynamic environment.
- CO.3 They become familiar about the process of building up skills for effective HR manager.
- CO.4 Learn about the human resource planning, HR policy and HR information system.
- CO.5 Learn about the concept of job analysis, recruitment, selection, induction and placement.
- CO.6 They become familiar about the employ promotion, transfer and separation, career planning and development.
- CO.7 Clarify the employ training and executive development.
- CO.8 Learn about the performance and potential appraisal and empowerment of employees.
- CO.9 They become familiar about the quality of work life, compensation, incentives and employ benefits.
- CO.10 Learn about the concept of job satisfaction and job stress management.

International Business Environment (MC 202):-

- CO.1 They become familiar about the international business with its scope and importance.
- CO.2 They become familiar about the framework for analyzing international business environment with reference to major factors of macro environment.
- CO. 3 Clarify the concept of multinational corporations, their role, types and importance.
- CO.4 Learn about the foreign investment, its types and importance.
- CO. 5 They become familiar about various international economic institutions: WTO, UNCTAD, IMF and World Bank.

- CO. 6 Learn about the generalized system of preferences and international commodity agreements.
- CO. 7 Learn about the economic cooperation with its types and rationale and economic associations: EU, NAFTA, ASEAN, SAFTA.
- CO.8 They become familiar about the foreign exchange markets and its participants.
- CO. 9 Students learn to clarify the determinants of foreign exchange rate and exchange rate arrangements in India.
- CO. 10 Learn about the foreign exchange risk and its management.

Strategic Marketing (MC 203):-

- CO.1 They become familiar about the concept and hierarchy of strategies with strategic role of Marketing.
- CO.2 Learn about the strategic marketing planning process and marketing plan.
- CO.3 Students learn to Clarify the corporate strategic decisions Corporate mission, vision, goals and objectives.
- CO.4 Learn about the corporate growth strategies, resource allocation, business strategies and their marketing implications.
- CO.5 Learn about the environmental analysis: Internal, external and custom environment.
- CO.6 Students learn to clarify the industry and competitor analysis, SWOT Analysis and portfolio analysis.
- CO.7 Learn about the concept of market segmentation, targeting and positioning.
- CO.8 They become familiar about the marketing strategies for new market entries, growth markets, mature markets and declining markets.
- CO.9 Learn about the relationship between business strategies and marketing mix.
- CO.10 Students learn to clarify the marketing strategy implementation and controlling marketing strategies.

Financial Management and Policy (MC 204):-

- CO.1 Learn about the financial management its objectives, scope and importance.
- CO.2 They become familiar about the functions of finance executive in an organization, time value of money and recent development in financial management.
- CO.3 Learn about the financial planning, its need, process, significance and drafting of a financial plan.

- CO.4 Clarify the concept of financial planning its benefits and techniques of financial forecasting.
- CO.5 Learn about the sources of finance: Short term, Medium term and Long term.
- CO.6 They become familiar about the concept, significance, methods and problems in computation of cost of capital.
- CO.7 Learn about the working capital management, its need, types and assessment of working capital management.
- CO.8 Clarify the management of cash, marketable securities and receivables and banking norms.
- CO.9 Learn about the capital budgeting decisions, its nature and importance with factors influencing capital expenditure decisions.
- CO.10 They become familiar about the process of capital budgeting, process, evaluation criteria, risk analysis and expenditure control.

Corporate Accounting (MC 205):

- CO. I Learn about the concept of share issue, forfeiture and valuation of shares.
- CO. 2 They become familiar about the final accounts of company.
- CO. 3 Students learn to Clarify the concept of Amalgamation, absorption and reconstruction.
- CO.4 Learn about the Human Resource Accounting and Lease Accounting.
- CO. 5 Learn about the preparation of consolidated financial statements of holding and subsidiary companies.
- CO.6 They become familiar about the corporate reporting requirements and current practices.
- CO. 7 Learn about the concepts of periodic reporting, segment reporting, social reporting and harmonization in corporate reports.

Business Statistics (MC 206):

- CO. 1 Learn about the concept of regression, linear regression equation and regression equation in terms of simple correlation.
- CO. 2 They become familiar about the correlation, multiple and partial correlation, coefficients and reliability of the estimate.
- CO. 3 Students learn to clarify the concept of Index Numbers, its types and uses, methods of constructing price and quality indices.
- CO. 4 Learn about the test of adequacy, chain base index numbers, base shifting, splicing and deflating and consumer price index.

- CO. 5 They become familiar about the time series analysis, its components and models.
- CO. 6 Students learn to clarify the methods of constructing seasonal index, adjusting time series data for seasonal variations and estimation of seasonal variations.
- CO. 7 Learn about the theory of probability approaches to defining probability, laws and theories of probability.
- CO. 8 They become familiar about the concept of probability distributions: Binomial, Poisson and Normal Distributions.

M.Com II

ADVANCE FINANCIAL MANAGEMENT (MC 302):

- CO1 :- Learn about meaning, types and determinant of dividend decisions
- CO2 :- Students are made aware about different dividend models and corporate dividend practices in India
- CO3 :- Students are made aware about the concept determinants and theories of capital structure
- CO4 :- Learn about operating ,financial and combined leverage
- CO5: Students get introduced about the need, objectives and techniques of corporate restructuring
- CO6: Learn about objectives, legal and procedural aspect of merges and takeover process
- CO7: Students learn to Provide an overview of mergers and takeovers in India along with post merger problems and there solutions
- CO8 :- They become familiar about the need and steps in financial restructuring
- CO9:- Students are made aware about the concept of buy back of shares along with its necessity and procedure
- CO10 :- Students get introduced about sick units Students are made aware about financial management of sick units

FINANCIAL INSTITUTIONS AND MARKETS (MC 304):

- CO1:- Students get introduced about the role of financial system Students are made aware about financial market in detail
- CO2 :- Students learn to Provide an overview of Indian financial system and its contributions in economic development
- CO3:- They become familiar about in detail money market and capital market

- CO4 :- Students learn to Provide an overview of role of security exchange board of India (SEBI) in development of financial market
- CO5:- Students are made aware about the concept, objectives and functions of development banks
- CO6:- Learn about the operational and promotional activities of development banks in India
- CO7 :- Students are made aware about the concept and functions of merchant banking
- CO8 :- They become familiar about about the government policy on merchant banking services and SEBI guidelines for merchant banking in India
- CO9 :- Students are made aware about the concept and regulation of mutual funds in India
- CO10 :- Students learn How mutual schemes are designed and marketed They become familiar about the latest mutual fund schemes in India

MARKETING RESEARCH (MC 308):

- CO1 :- Students get introduced about marketing research Students are made aware about its nature and scope
- CO2 :- Students are made aware about marketing research process in detail
- CO3: Students learn How research problem is formulated Students are made aware about with a hypothetical example
- CO4 ;- Students get introduced about research design Students are made aware about exploratory, experimental and descriptive research
- CO5 :- They become familiar about in detail about sampling design
- CO6: Students get introduced about questionnaire What information should be included in a good questionnaire
- CO7: Students learn about the different methods of data collection for research
- CO8: Students learn about different types of errors in research Differentiate between sampling and non-sampling errors
- CO9: Students are made aware about the meaning and process of qualitative research
- CO10 :- :- Students are made aware about the different techniques of qualitative research

ADVERTISING MANAGEMENT (MC 309):

- CO1 :- Students are made aware about the nature and importance of Advertising
- CO2 :-Students learn about different types of Advertising
- CO3 :-They become familiar about Social and Economic aspects of Advertising

- CO4 :- They become familiar about different Advertising Objectives
- CO5 :- Students are made aware about different methods of determining Advertising Budget
- CO6 :- Students get introduced about Advertisement Copy How it is developed
- CO7 :- Students learn about different types of advertising media
- CO8:- They become familiar about in detail about factors affecting media selection
- CO9:- They become familiar about the role and importance of advertising agency
- CO10 :- Students learn about the different methods of evaluating advertising effectiveness

HUMAN RESOURCE DEVELOPMENT(MC 316):

- CO1: Students are made aware about the concept, scope and principles of human resource development
- CO2 :- Students learn about the different approaches to human resource development Students learn about the difference between HRM and HRD
- CO3 :- They become familiar about the Qualities , Role and Responsibilities of HRD manager
- CO4 :- They become familiar about the concept of organizational effectiveness in detail
- CO5 :- Students learn about the emerging trends and challenges in HRD
- CO6 :- Students are made aware about importance, process and barriers to knowledge management
- CO7 :- Students learn about the different principles and theories of learning
- CO8: Students learn about the benefits and techniques of Role analysis
- CO9:- Students get introduced about the need of competency mapping How competency set is developed
- CO10 :- They become familiar about the concept ,category and content of learning in employee socialization and orientation
- CO11 :- Students learn How training and development programmes are designed and implemented
- CO12 :- They become familiar about the concept of organizational health and climate

PROJECT PLANNING AND CONTROL (MC 403):

- CO1:- They learn about Project and types of Projects. Also Students are made aware about the various project life cycle phases
- CO2 :- Students get introduced about 'Project Identification'. They become familiar about the process involved in project identification

- CO3:- They become familiar about the various steps involved in market and demand analysis.
- CO4: Students learn to choose the technology for a project, what factors are to be considered.
- CO5: Students learn about main components of project capital costs and project operating costs.
- CO6: They become familiar about the various sources used for providing long term and short term finance for an enterprise.
- CO7: Students are made aware about the factors which determine the capital structure of a company.
- CO8 :- Students learn Which institutions provide financial support to small enterprises Students are made aware about in brief.
- CO9 :- They become familiar about in detail the major components of cost of production
- CO10 :- Students get introduced aboutProject Appraisal List the various project appraisal methods
- CO11:-They learn about Social Cost Benefit Analysis (SCBA), objectives. Students learn about the SCBA guidelines formed by the financial institutions in India.
- CO12:- Students learn What stages are involved in PERT analysis. Differentiate between PERT and CPM.

SALES MANAGEMENT (MC 408):

- CO1 :- Students are made aware about concept, objectives and functions of sales management
- CO2 :- They become familiar about theories of selling and personal selling process
- CO3 :- They become familiar about importance ,approaches and process of sales planning
- CO4: Students learn about the different methods of sales for casting and how sales budgets are created
- CO5: They become familiar about purpose, principles and process of setting up a sales organizations
- CO6 :- Students get introduced about the need and procedure for setting up sales territories
- CO7 :- Students learn about different types of sales quota How sales quota is administered
- CO8: Students learn How sales force is managed
- CO9: Students learn How sales, costs and profitability is analyzed and controlled
- CO10 :- Students learn How sales force performance is evaluated
- CO11 :- Students learn about the different issues in sales management

SERVICES MARKETING (MC 409):

- CO1:- They become familiar about the concept, characteristics and classification of services marketing
- CO2:- They become familiar about customer perception and expectation of services
- CO3 :- Students are made aware about marketing mix of services
- CO4 :- They become familiar about the concept, dimensions and models of service quality
- CO5 :- Students learn about the goals of relationship marketing
- CO6 :- Students learn How service market is segmented and targeted
- CO7: They become familiar about various customer retention strategies
- CO8 :- Students learn about the different steps in service development
- CO9 :- Students learn How customer feedback and service recovery is made
- CO10 :- Students learn about the problems, objectives and strategies of communication and promotion of services
- CO11 :- Students learn How pricing and distribution of services is done
- CO12 :- Students learn How service delivery employee are managed
- CO13:- They become familiar about various strategies for managing and enhancing customer participation
- CO14 :- Students get introduced about customer protection and They become familiar about the ethics in services

ORGANISATIONAL CHANGE AND INTERVANTION STRATEGIES (MC 417):

- CO1:- They become familiar about the nature, types and forces of change
- CO2 :- Students get introduced abouttransformational planning
- CO3 :- Students get introduced about transition How it is managed
- CO4 :-Students learn about the different strategic leverages to implementing change
- CO5 :- Students get introduced about resistance to change How resistance to change be overcome
- CO6: They become familiar about nature, assumptions and characteristics of organizational development
- CO7 :- Students learn about interpersonal and team intervention in OD
- CO8 :- They become familiar about different types of system interventions
- CO9:- Students learn about the issues and challenges for OD practioners.

- CO10 :- Students learn what ethics must be followed by OD professionals.
- CO11 :- Students learn What were the past trends and future challenges OD in India Evaluate OD

STRATEGIC MANAGEMENT (MC 203):

- COI :- They learn about strategy, its characterstics and approaches to strategic decision making
- CO2 :- They become familiar about strategic management process
- CO3 :- Students learn to Differentiate between Vision, Mission and Objectives
- CO4: Students are made aware about concept and components of environmental appraisal
- CO5 :- Learn about different generic strategy alternatives
- CO6 :- Learn about various steps and scope of strategic formulation
- CO7: Students are made aware about the nature and usefulness of BCG model in strategic analysis. Students learn about its limitations
- CO8:-Students are made aware about the role of SWOT Analysis as a tool facilitating strategic choice at a business level
- CO9: They learn about Strategic choice. Students are made aware about the criteria/factors of strategic choice.
- CO10 :- Learn about need, process and techniques of strategic evaluation and control

Income Tax -II (BC 604):

C01: Students come to know about deductions U/S 80C to 80U.

C02: Students are made aware about the computation of total income & tax liability of an individual.

C03: Students are made aware about the computation of total income & tax liability of firm.

C04: Students come to know about a note on deduction of tax at source and advance payment of tax.

C05: Learn about powers of income tax authorities.

C06: Students are made aware about procedure for assessment and different type of returns.

C07: Learn about procedure for filling e- return and revised return.

C08: Students are made aware about recovery and refund of tax.

C09: Students come to know about different appeals to be made under income tax.

Course Outcomes for BBA

Course Outcomes for BBA I

Business Accounting (BBA 102)

- Learn about nature, scope and objectives of accounting.
- 2. Students are made aware about different accounting concepts and conventions.
- Students learn to differentiate capital and revenue income and expenditure.
- Students are made aware about journal and ledger Also Students are made aware about Double Entry System.
- Students get introduced about Trail Balance Students are made aware about its objectives.
- 6. Students learn to give all Adjustment Entries and how these are shown in final Accounts.

Analysis of Financial Statement (BBA 109)

- 1. Students are made aware about different financial statement
- Students get introduced about ratio analysis Students are made aware about different accounting ratios in detail

 Students get introduced about cash flow Statement and how it is prepared. Students get introduced about fund flow statement Students are made aware about the funds from operation, statement of change in working capital, funds flow Statement

BBA-112: Business Mathematics-II

CO1 students will be able to understand and solve the problems related to Plane Analytical

Geometry.

CO2 Learn about on Arithmeticrithmetic, geometric and harmonic progressions.

CO3 Obtain knowledge on ntegral calculus, definite integral and its application in business.

Learn the basics of Logarithm, Law of operations, log tables,

CO4 Will able to learn practical problems of compound interest.

Business Communication I (BBA 113):

- Students learn to Write the meaning, process and importance of Business Communication
- 2. Students learn about the Essentials features of effective Communication
- 3. Students are made aware about the various models of Communication
- Students get introduced about the procedure to Students come to know about a business
 Applications
- 5. Students get introduced about non-verbal Communication and write its importance
- Students get introduced about the difference between verbal and non-verbal.
 Communication

Business Organization (BBA 101):

- 1. They learn about concept, nature and objectives of Business
- 2. Students are made aware about meaning, advantages and limitation of sole proprietorship
- 3. Students are made aware about the rights, duties and liabilities of partnership
- Students get introduced about Joint Stock Company Students are made aware about the procedure of formation of company
- 5. Students learn about MNCs and their role in a country
- 6. Students are made aware about non-profit organization

7. Students learn to write short note on CII, FICCI and ASSOCIATION

BBA-104: Business Mathematics-I

After completing this course

CO1 students will be able to understand and solve the problems related to Set theory, logical statements and truth tables.

CO2 Students able to solve linear and quadratic equations.

CO3 Students learn about Permutations and combinations. Binomial theorem.

CO4 will gain knowledge on the topic Limit and continuity, differential calculus (including maxima and minima; excluding trigonometric functions),

CO5 Learn detailed knowledge of Matrices and determinate, solution to linear equations by using Cramer's rule and matrix inversion method.

Principles of Business Management (BBA 108)

- Students get introduced about management, its nature and scope. Also Learn about different through in the development of management.
- Students get introduced about planning Learn about its process and technique. Also Learn about decision making and its process and technique.
- 3. Learn about about departmentation and various basis for departmentation.
- Students are made aware about meaning, merits and demerits of delegation of authority and decentralization.
- 5. Students are made aware about staffing function of management and its process
- Students are made aware about communication and its barriers. Also Students are made aware about controlling, its process and different techniques of controlling.
- 7. Students are made aware about in brief social responsibility and business ethic

Course Outcomes for BBA II

Understanding Human Behaviour (USB) (BBA 111)

- Students get introduced about understanding human behavior and Students learn about the approaches of USB
- 2. Students get introduced about personality Write the theories of personality

- Students learn about the theoretical views of regarding motivation and its advantages and disadvantages
- Students learn about perception and Students get introduced about the law of perceptual organization.
- Students learn to write the meaning of learning. Students get introduced about classical conditioning and operant theory of learning

Micro Business Environment (BBA 202):

- Students are made aware about the factors of business environment that affect the business organization either internally or externally
- Students are made aware about the various type of economic system in detail (meaning and nature)
- Students get introduced about Economic planning in India and Students learn about the objectives & problems of Economic planning in India
- 4. Students are made aware about the various roles of government for Indian growth
- 5. Students learn to write the concept and dimensions of social responsibility of Business
- Students get introduced about business ethics and Students are made aware about its advantages and limitations
- Students are made aware about the important features of competition Act
- 8. Students learn to difference between MRTP act and competition Act

Business Statistics I (BBA 203):

- 1. Students learn to write the meaning, functions and limitation of statistics
- 2. Students get introduced about data and write the types of data
- Students get introduced about graphical representation Write its types, merits and demerits
- Students get introduced about central tendency Students are made aware about the various types of average with example
- 5. Students are made aware about the different type of measures of dispersion
- Students get introduced about sampling, Students are made aware about the various categories of sample and how sample is differ from census

- Students get introduced about business forecasting Write the methods and procedure of forecasting
- Students learn about the types of Index number and Students learn about the methods of constructing Index number

Management Accounting (BBA 204):

- Students learn to write the meaning, nature and convention & techniques of Management Accounting
- 2. Students are made aware about the various costs concept classification of cost
- Students learn to write the meaning, types and Evaluation of budgeting in a business organization
- Students get introduced about marginal costing and Students are made aware about the various methods of break -even -analysis
- Students get introduced about standard costing and write the types of variances in standard costing
- 6. Students are made aware about the various technique of controlling in costing
- Students get introduced about responsibility accounting, write its benefits and limitation

Business Communication II (BBA 206)

- Students get introduced about business communication Write its nature and importance
- Students learn to write the process of communication and also Students are made aware about verbal and non- verbal communication
- 3. Students learn about the barriers to communication
- 4. Students learn about the methods of writing the different letters in a business organization
- 5. Students learn how will they conduct and prepare for interview and meetings
- Students get introduced about organizational communication and Students learn about the components of organizational communication

Human Behavior at Work (BBA 208)

- Students learn to write the meaning and nature of behavior at work.
- Students learn to write the interpersonal awareness and its process.
- Students get introduced about interpersonal trust.

- Students get introduced about group and Students learn about the types and theories of groups
- 5. Students learn to write the meaning and components of group dynamics.
- Students get introduced about team, types of team, and stages of team development.
- 7. Students learn about the team building techniques.

Macro Business Environment (BBA 209)

- 1. Students learn to write the Meaning of liberalization and main features of liberalization
- Students get introduced about privatization and Students get introduced about the impact of privatization on Indian Economy
- Students get introduced about globalization and write the advantages & limitation of globalization
- Students learn to write the meaning of industrial policy and also Students are made aware about the main features of new industrial policy
- 5. Students are made aware about new foreign trade policy
- Students learn to write the impact of Multination Corporation on the foreign currency funds of India
- Students learn to write the function of World Bank.
- 8. "IMF is the bank of central banks" Students are made aware about this statement.
- Students get introduced about world trade organization write the impact of WTO on India's Economic growth
- Students get introduced about monetary policy and Students learn about the instruments of monetary policy
- Students learn to write meaning and significance of fiscal policy.
- Students are made aware about the main features of EXIM policy 2015-20.

Business Statistics-II (BBA 210):

- Students are made aware about the nature, types and methods to study the correlation.
- Students learn to write the importance, methods of linear regression and properties of regression lines.
- Students get introduced about probability, types and theories of probability.
- Students get introduced about trend, seasonal, cyclical and random variation in time series.

- 5. Students learn to write the procedure of hypothesis testing.
- 6. Students get introduced about CHI square test Write its procedure

Marketing Management (BBA 211):

- 1. Students learn to write the meaning and scope of marketing management.
- Students get introduced about marketing MIX.
- 3. Students learn to Write the meaning and component of marketing information system.
- 4. Students are made aware about the meaning and importance of consumer behavior.
- Students get introduced about new product development process.
- Students learn to what the stages of product life cycle.
- Students learn about the types of product.
- Students get introduced about branding and packaging decision and Students learn about their impact.
- Students are made aware about the procedure of setting the price of product and also They learn about pricing policy.
- 10. Students are made aware about the role of various distribution channels.
- Students learn to how many sources available in marketing for promotion of a product.

Financial Management (BBA 212)

- 1. Students learn to write the meaning, nature and scope of financial management.
- Students are made aware about the determinants and process of financial planning.
- 3. Students learn to write the meaning, process and methods of capital budgeting.
- 4. Write the significant and methods of cost of capital.
- Students get introduced about over and under capitalization and how can we reduce the effect of both types of problems.
- Students are made aware about the theoretical views of capital structure with example.
- Students get introduced about dividend policy decision Students are made aware about its nature and models in detail.
- 8. Students learn to write the concept, nature and factors of working capital management.
- Students learn to How many ways we can acquire the finance from market.

Principles of Material Management (BBA 213):

- Students get introduced about material management Write its nature and scope.
- Students learn to write the process and function of material management.

- 3. Students learn to Write the cycle and flow control system of material planning.
- 4. Students learn to write the procedure, principles, and objectives of purchasing.
- 5. Students learn about the methods of statistical quality control.
- 6. Students learn about the techniques of inventory management in an organization.

Course Outcomes for BBA III

Entrepreneurship Development (BBA 308):

- 1. Students are made aware about the Entrepreneurship meaning, nature and scope
- Students learn about the essential qualities of successful Entrepreneur
- 3. Students are made aware about the role of Entrepreneurship in Economic development
- 4. Students learn about the sources of financing to develop a new venture
- 5. Students get introduced about the procedure for development of new venture
- Students get introduced about the role of govt, and non- govt, agencies for promoting the Entrepreneurship in India

Principles of Production Management (BBA 306):

- 1. They learn about product and its types
- 2. Students are made aware about the production type and its significance
- Students get introduced about production management. Students are made aware about its functions.
- 4. Students get introduced about the procedure of production management
- 5. Students are made aware about the various techniques of inventory management in detail
- Students are made aware about the importance of Inspection and Quality Control in production
- Students get introduced about ISO certification and Statistical Quality Control in production

Export Procedure and Documentation (BBA 305)

- Students learn about the facilities which are fullfield for entering in Export business.
 Write its procedure.
- Students learn about the documents required for Export Business. Students are made aware about in detail
- 3. Students are made aware about aligned document system

- 4. They become familiar about the methods of payment in International Business
- 5. Students are made aware about institutional infrastructure for Indian Export
- Students learn about the incentives and schemes provided by the govt. for promoting Export business
- 7. Students are made aware about EXIM policy in detail
- How the risk is managed by the Exporter. Students learn about the techniques used by the
 Exporter for controlling risk

Introduction to Financial Services (BBA 312):

- 1. Students are made aware about the meaning, advantages and types of Financial Services
- Students get introduced about Economic Environment Students are made aware about players in financial services
- Students get introduced about merchant Banking And Students are made aware about its functions
- Students get introduced about book building and reverse book building Students learn about the steps for issuing shares under book building
- 5. Students are made aware about the legal procedure of SEBI in detail
- Students are made aware about leasing and hire purchase Learn about the types of lease
 account
- 7. Students come to know about the meaning, types and advantages of Mutual Funds

Principles of Insurance (BBA 311):

- 1. Learn about importance and functions of Insurance
- 2. Students are made aware about the purpose and functions of general Insurance
- 3. Students are made aware about the different principles of Insurance
- 4. Students come to know about the claim settlement procedure of life Insurance
- 5. Learn about the claim settlement procedure of general Insurance
- Students are made aware about the code of conduct for Insurance agent .Students get introduced about the unfair practices on the part of agent
- 7. Students learn about the schemes of life Insurance under LIC Act 1956
- 8. Students learn about the schemes of General Insurance

Logistic Management (BBA 310):

1. Learn about the scope, role and importance of Logistic Management

- 2. Students are made aware about total cost concept system approach to Logistic.
- 3. Learn about the role of Logistic in supply chain Management.
- Students are made aware about types and functions of warehousing.
- 5. Students are made aware about inventory Management methods of cost control.
- Students learn to mention the types of transportation network of product.
- Students get introduced about Logistic packaging and also Students are made aware about packaging material and packaging cost
- Students are made aware about the role of technology in Logistic Management. Students learn to Evaluates its performance.

Principles of Banking (BBA 303):

- They learn about the term Bank Students are made aware about its types
- 2. Students are made aware about Banking Regulation Act 1949 and main Amendments
- 3. They learn about RBI and its functions
- 4. Students are made aware about different Banking norms
- 5. Students learn about the E- Banking reforms in banking sector after 1991
- They become familiar about the important Banking techniques which can be used in banking sector
- 7. Students come to know about the priority sector lending. Analysis it's performance

Principles of Retailing (BBA 302):

- Students are made aware about the meaning and features of retailing Also They become familiar about the evolution of retailing with special reference to the Indian Economy
- Students get introduced about the basic difference between organized and unorganized retailing
- Students get introduced about non store retailing They become familiar about its type, advantages and disadvantages of retailing
- Students learn about the general views regarding a carrier in retailing They become familiar about the skills required for adopting retailing as a carrier
- Students get introduced about consumer behaviour Also Students are made aware about the process of consumer behaviour

- Learn about store location in retailing and also They become familiar about types of store location.
- 7. Learn about the retail organization and structure of retail organization.
- Students learn to write the meaning of retail merchandise and Students are made aware about the factors affecting the functions of retail merchandise.
- 9. Students learn to write the short note on technology in retailing.

Business Law-I (BBA 301):

- Students get introduced about contract Students are made aware about the major provisions of contract.
- Students are made aware about Indemnity and Grantee Difference between Indemnity and Grantee.
- 3. Students are made aware about the meaning of pledge and bailment with example.
- Students are made aware about Indian Sale of Goods Act 1930. Students learn about the legal provisions of this Act.
- Students are made aware about unpaid seller. Students learn about the rights of unpaid seller.
- Students are made aware about performance of the contract of sales.
- Students are made aware about negotiable instrument Act 1981. Learn about the legal provision and implication of negotiable instrument.

Business Law-II (BBA 309):

- Students learn about the legal aspects relating to the promotion and establishment of companies in India
- Students Learn about Memorandum of Association. Students are made aware about the clauses of MOA.
- Students get introduced about Articles of Association Learn about its content.
- Students learn to write the procedure of issue and allotment of shares.
- 5. Students are made aware about the powers, duties and functions of directors.
- 6. Students come to know about the procedure of winding up of company.
- Learn about companies meetings and also learn about the legal provisions for companies meetings.
- 8. Students are made aware about SEBI act 1992 and its legal provisions.

GOVERNMENT P. G. COLLEGE, AMBALA CANTT.

Programme/Subject Specific Outcomes (PSOs)

Subject: Zoology

Programme/Subject Specific Outcomes (PSOs) for Zoology subject of B.Sc. Medical

- Students will gain knowledge and skill in the fundamentals of animal sciences, variations in life cycles and their interaction with the environment.
- Analyse complex interactions between various animals of different groups, their distribution and their relationship with the environment
- Apply the knowledge of internal structure, functions and physiological processes at the cellular and organism levels.
- 4. Correlates the physiological processes of animals and relationship of organ systems.
- Students will be capable of using knowledge of subject and analytical methods in identifying and solving various complex situations of living forms and environment taking into consideration ethics and responsibilities.
- Students clear their fundamentals about various concepts of genetics and its importance in human life.
- 7. Youth understands the complex evolutionary processes and behaviour of animals.
- 8. Students impart knowledge of environmental conservation and its importance.
- Become familiar with agro-based small-scale industries such as poultry farming, pig farming, sericulture, aquaculture and vermicompost preparation.
- Teaching of this subject will also develop ability in youth to have understanding of basic Zoology with effective communication ability.
- 11. This Under Graduate programme will develop awareness about sustainable utilization of natural resource.
- 12. This Subject will develop personnel who can be capable of doing Masters in the subject and can develop career as teacher, scientist, industrialist and as entrepreneur.

B.Sc. Zoology Semester-I PAPER CODE - ZO21

Life and Diversity from Protozoa to Porifera & Cell Biology - I

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objective: To understand the taxonomic position, general characteristics, body organization and origin and evolutionary relationship of animals belonging to different Phylum of Protozoa to Helminthes. To apprise students about the dynamics of cell and biology of cancer

Course outcomes:

COZO21.1. Student will be able to describe unique characters Protozoa to Porifera.

COZO21.2. Students will understand the nature and basic concept of cell biology and genetics.

COZO21.3 Students will be able to apply the knowledge of internal structure of cell and their role in many metabolic function of organism

B.Sc. Zoology Semester-I PAPER CODE - ZO21

Life and Diversity from Coelentrata to Helminthes & Cell Biology - II

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objective:

To make students understand the general characteristics of animals Kingdom, body organization, taxonomic position and origin and evolutionary relationship belonging to Phylum Coelentrata to Helminthes. To apprise students about the dynamics of cell and biology of cancer

Course Outcomes:

COZO21.1. Student will be able to describe unique characters and recognize life functions of Phylum Coelentrata to Helminths.

COZO21.2. Will be capable to identify the diversity and ecological role of Phylum Coelentrata to Helminthes

COZO21.3 To apprise students about the dynamics of cell and biology of cancer

B.Sc. Zoology Semester-II PAPER CODE-ZO22

Life and Diversity from Annelida to Arthropoda and Genetics-I

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

To make students understand the basic characters of Chordates, origin and ancestory Objective: from Annelida to Arthropoda

Course Outcomes:

COZO22.1. Through this core course the students will be capable of identifying different protochordateand will be capable of Imparting conceptual knowledge of Annelida to Arthropoda and associations in relation to their environment.

COZO22.2. Will be able to understand the basic concepts of evolutionary relationship among Annelida to Arthropoda.

B.Sc. Zoology Semester-II PPAER CODE -ZO22

Life and Diversity from Mollusca to Hemichordata and Genetics-II

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objective: To make students understand the basic characters of Chordates, origin and ancestory

from Mollusca to Hemichordata.

Course Outcomes:

COZO22.1. Through this core course the students will be capable of identifying different protochordate and will be capable of Imparting conceptual knowledge of Mollusca to Hemichordata and associations in relation to their environment.

COZO22.2. Will be able to understand the basic concepts of evolutionary relationship among Mollusca to Hemichordata.

> B.Sc. Zoology Semester-I&II PAPER CODE-ZO2122 (Zoology Practical Based on ZO21 &ZO22)

External Marks: 100 Time allotted: 6 Hours

Objective: To have practical knowledge about identification and understanding of the classification

of invertebrates Phylum of Protozoa up to Helmenthes.

Course Outcome:

COZO2122.1. Students will be capable of identifying the characters and classification of invertebrates species.

COZO2122.2. Students will be able to realize and explain ecological and economic importance of different invertebrate species.

COZO2122.3 Students will be able to conduct the morphomatric analysis of chromosomes and demonstrate cell division.

Semester-III PAPER CODE-ZO23 Life and Diversity of Chordates - I

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objective: To make students understand the basic characters of Chordates, origin and ancestory of chordates and about the general characters, scale and fin pattern in class Pisces.

Course Outcomes:

COZO23.1. Through this core course the students will be capable of identifying different protochordate and will be capable of Imparting conceptual knowledge of chordates, their adaptation and associations in relation to their environment.

COZO23.2. Will be able to understand the basic concepts of evolutionary relationship among chordates and fishes.

B.Sc. Zoology Semester-III PAPER CODE-ZO23 Mammalian Physiology-I

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objective:

To make students understand the structure and classification of bio-molecules, dynamics of enzymes and concept of physiology of bones and muscles.

Course Outcomes:

COZO23.1. Students will be able to understand and explain the mechanism that works to keep mammalian body functioning.

COZO23..2. Students will be able to explain the interaction and interdependence of physiological and biochemical processes.

SEMESTER – IV PAPER CODE-ZO24

Paper-I: Life and Diversity of Chordates - II

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objective:

To make students understand the classification of vertebrates Phylum and ways of

identifying respective species

Course Outcomes:

COZO24.1. Students will be able to classify and identify vertebrates' species and their skeleton

COZO24.2. Learners will also realize and understand economic importance of the vertebrate species and will be aware about their conservation.

B.Sc. Zoology Semester-IV PAPER CODE-ZO24 Mammalian Physiology-II

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objective:

To make students understand the structure and classification of bio-molecules, dynamics of enzymes and concept of physiology of Blood circulation, respiration and excretion.

Course Outcomes:

COZO24.1. Students will be able to understand and explain the mechanism that works to keep mammalian body functioning.

COZO24.2. Students will be able to explain the interaction and interdependence of physiological and biochemical processes.

COZO24.3. Students will be able to explain the mechanism of action of hormones and relatedmolecules involved in various physiological processes

B.Sc. Zoology Semester-III & IV PAPER CODE-ZO2324 (Zoology Practical Based on ZO23 & ZO24)

External Marks: 100

Time allotted: 6 Hours

Objective: To make students understand the classification of vertebrates Phylum and ways of

identifying respective species.

To develop practical knowledge of various physiological experiments and theirrole in

various biological processes.

Course Outcomes:

COZO2324.1. Students will be able to classify and identify vertebrates' species and their skeleton

COZO2324.2. Learners will also realize and understand economic importance of the vertebrate species and will be aware about their conservation.

COZO2324.1. Students will be able to understand and perform biological and analytical techniques in labs to explain biological activities

COZO2324.2. Will be able to perform experiments of haematology like DLC, Blood group testing etc.

B.Sc. Zoology Semester-V PAPER CODE-ZO25 Environmental Biology

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objective: To make students understand the structure and classification of bio-molecules, dynamics

Objective: To apprise the students about interaction between organisms and

environment and exchange of nutrients within the ecosystem.

Course Outcomes:

COZO25(i).1. Students will be able to describe the various biological interactions and relation between abiotic and biotic factors.

COZO25(i).2. Students will able to understand the causes of different types of pollution and their management strategies.

B.Sc. Zoology Semester-V PAPER CODE -ZO25 Evolution and Developmental Biology

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objectives:

- To make students aware how species evolve and the theory of natural selection, population dynamics.
- 2. To understand how organisms maintain gametic population and understand fertilization process.

Course Outcomes:

COZO25(i).1. This course will enable the students to understand the evolution of life on earth and theories in evolutionary biology.

COZO25(i).2. Students will be able to describe the events that lead up to fertilization, its stages and cellular mechanisms for gastrulation, and embryonic development, fertilization, implantation and gestation, parturition.

B.Sc. Zoology Semester-VI PAPER CODE-ZO26 Aquaculture and Pest Management-I

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objective:

To apprise the students with the necessary basic information about fishery and aquaculture and to provide the technical and general knowledge necessary for competent fisheriesmanagement.

To impart knowledge for the identification of the different species of insect pests and learning of pest management techniques with the understanding of practical application of pesticides and their proper use.

Course Outcomes:

COZO26(i).1.Students will understand concepts of fisheries, fishing tools and site selection for afishery/aquaculture industry

COZO26(i).2. Students will capable to undertake the small Aqua culture projects and will be able to explaininduced breeding and post harvesting techniques.

COZO26(i).3. Students will able to understand ecologically important and harmful insects.

COZO26(i).4. Will be able to recognize ecology and morphology of insect pest and the nature of damage done by them.

B.Sc. Zoology Semester-VI PAPER CODE-ZO26 Aquaculture and Pest Management-II

External Marks: 40 Internal Assessment: 10 Time allotted: 3 Hours

Objective:

To apprise the students with the necessary basic information about fishery and aquaculture and to provide the technical and general knowledge necessary for competent fisheries management.

To impart knowledge for the identification of the different species of insect pests and learning of pest management techniques with the understanding of practical application of pesticides and their proper use.

Course Outcomes:

COZO26 (i).1. Students will understand concepts of fisheries, fishing tools and site selection for a fishery/aquaculture industry

COZO26 (i).2. Students will capable to undertake the small Aqua culture projects and will be able to explain induced breeding and post harvesting techniques.

COZO26 (i).3 Students will able to understand ecologically important and harmful insects.

COZO26 (i).).4. Will be able to recognize ecology and morphology of insect pest and the nature of damage done by them.

B.Sc. Zoology Semester-III & IV PAPER CODE-ZO2526 (Zoology Practical Based on ZO25,ZO26)

External Marks: 100 Time allotted: 6 Hours

Objective: To develop observational, analytical and Evaluation skills related to ZO26, ZO26, 1771

&1772.

Course Outcomes:

CO ZO2526 (i).1. Students will able to identify insect pests and the nature of damage caused by them CO ZO2526 (i).2. They will also understand the ecology and life history of these insect pests.

Commerce -

PROGRAM OUTCOME FOR B.COM

- PO 1: After completing three years for Bachelors in Commerce (B.Com) program, students would gain a thorough grounding in the fundamentals of Commerce and Finance.
- PO 2: The commerce focused curriculum offers a number of specializations and practical exposures which would equip the student to face the modern-day challenges in commerce and business.
- PO 3: After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.
- PO 4: Capability of the students to make decisions at personal & professional level will increase after completion of this course.
- PO 5: Students can independently start up their own Business.

PROGRAM SPECIFIC OUTCOME FOR B.COM

- PSO 1: Students will be able to demonstrate progressive learning of various tax issues and tax forms related to individuals. Students will be able to demonstrate knowledge in setting up a computerized set of accounting books
- PSO 2: Students will demonstrate progressive affective domain development of values, the role of accounting in society and business.
- PSO 3: Students will learn relevant financial accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
- PSO 4: Students will learn relevant managerial accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business. Learners will gain thorough systematic and subject skills within various disciplines of commerce, business, accounting, economics, finance, auditing and marketing.
- PSO 5: Students will be able to play roles of businessmen, entrepreneur, managers, consultant, which will help learners to possess knowledge and other soft skills and to react aptly when confronted with critical decision making.
- PSO 6: Learners will be able to recognise features and roles of businessmen, entrepreneur, managers, consultant, which will help learners to possess knowledge and other soft skills and to react aptly when confronted with critical decision making.
- PSO-7: Learners will be able to prove proficiency with the ability to engage in competitive exams like CA, CS, ICWA and other courses.

PSO - 8: Learners will acquire the skills like effective communication, decision making, problem solving in day to day business affaires

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- PSO 9: Learners will involve in various co-curricular activities to demonstrate relevancy of foundational and theoretical knowledge of their academic major and to gain practical exposure.
- PSO 10: Learners can also acquire practical skills to work as tax consultant, audit assistant and other financial supporting services.
- PSO -11: Learners will be able to do higher education and advance research in the field of commerce and finance.
- PSO 12 Students also acquire skills to work as tax consultant, audit assistant and other financial supporting services.
- PSO 13: Students have choices to pursue professional courses such as CA, M.COM, MBA, CMA, ICWA, CS, etc

PROGRAM OUTCOME FOR B.COM CAV

- PO 1: Student will be able to gain knowledge in commerce and accounting software for corporate requirements.
- PO 2: Students can get employment in IT fields, Software, Banks, Companies, BPOs and KPOs.
- PO 3: Students will be able to demonstrate professional ethics in the social and legal aspects of commerce.
- PO 4: Students will be able to integrate the ethical behavior in self-learning, apply towards lifelong learning and acquiring knowledge in modern corporate and the IT sector. PO 5: Students will be able to design and develop reliable software applications for social needs and excel in IT enabled services.
- PO 6: Students will be able to analyze and identify the customer requirements in multidisciplinary domains, create high level design and implement robust software applications using latest technological skills.
- PO 7: Students will be able to perform professionally with social, cultural and ethical responsibility as an individual as well as in multifaceted teams with positive attitude.

PROGRAM SPECIFIC OUTCOME FOR B.COM CAV

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- PSO 1: Students will able to understand the concepts of commerce and computer application operations.
- PSO 2: Students will be able to apply the current techniques, skills, and tools necessary for computing practices.
- PSO 3: Ability to design, implement domain knowledge for computer programming.
- PSO 4: Professional Skills: Attain the ability to design and develop computer applications, evaluate and recognize potential risks and provide innovative solutions.
- PSO 5: Successful Career and Entrepreneurship: Explore technical knowledge in diverse areas of Computer Applications and experience an environment conducive in cultivating skills for successful career, entrepreneurship and higher studies.

PROGRAM OUTCOME FOR BBA

- PO 1: Students will be able to acquire knowledge and skills in the field of management, accounting, marketing and human relations.
- PO-2: Students will be able to apply the entrepreneurial and managerial skills for effective and business management.
- PO 3: Students will be able to acquire employability skills through the practical awareness on the IT in management.
- PO 4: Students will be able to comprehend applicability of management principles to situation in global business world.
- PO 5: Students will be able to develop legal and ethical value for the continuous development of business venture.

PROGRAM SPECIFIC OUTCOME FOR BBA

- PSO 1: Students will be able to remember the concept of management principles, accounting and marketing operations.
- PSO 2: Students will understand the leadership skills through internship training.
- PSO 3: Students will be apply the managerial knowledge in the business for effective decision making.
- PSO 4: Students will be able to demonstrate critical thinking skills in understanding managerial issues and problems related to the global economy and international business. PSO 5: Students will be able to develop ethical thinking.
- PSO 6: Students will develop functional and general management skills.

PROGRAM OUTCOME FOR M.COM

- PO 1: Students will be able to apply relevant financial tools in Manufacturing and Service operations.
- PO 2: Students will be able to apply research technique for decision making
- PO 3: Students will be able to use accounting software
- PO 4 Students will be able to acquire Technical and decision making skills (in the area of Accounting, Taxation, Portfolio analysis and E Commerce
- PO 5: Students will be able to develop creativity in the area of Marketing
- PO 6: Students will get comprehensive knowledge of Finance, Accounting, Taxation and Business laws.

PROGRAM SPECIFIC OUTCOME FOR M.COM

Students will be able to:

- PSO 1: Apply financial tools in Projects and in real time Business helps in Decision making
- PSO 2: Use statistical tools in Behavioural research for business decision making
- PSO 3: Adapt to recent changes in Marketing, Human Resource, Taxation, Environment and in investment of securities
- PSO 4: Analyse and evaluate the operation of the business related issues.
- PSO 5: To cater to the manpower needs of companies in Accounting, Taxation, Business Laws, Auditing, Financial analysis and Management.
- PSO 6: To enrich communication, ethical values, team work, professional and leadership skill sets of students.
- PSO 7: To inculcate entrepreneurship and managerial skills in students so as to enable them to establish and manage their business effectively
- PSO 8: To integrate knowledge, skill and attitude that will sustain an environment of learning and creativity among the students with an assurance for good careers.

COURSE OUTCOMES

Course Outcomes for B.Com General

B.com General

Course Outcomes for B.Com I

Financial Accounting-I (BC 101):

C01: Students are made aware about need & scope of financial accounting.

C02: Learn about accounting principles and conventions.

C03: Students come to know about accounting equations.

C04: Students are made aware about different rules of Journalising.

C05: Learn about classification of income, expenditure and receipts.

C06: Students are made aware about different methods of depreciation accounting.

C07: Students are made aware about preparation of final accounts.

C08: Students come to know about accounts of Non-profit organisation.

C09: Students are made aware about calculation of normal & abnormal loss & valuation of unsold stock in Consignment Accounts.

Micro Economics (BC-102)

C01: This paper is designed to expose students to the basic principles of microeconomic theory,

C02: Introducing them to topics such as basic demand, supply tools, and the implications of taxation and subsidies on the market outcome, consumer and producer behaviour,

C03: Student will learn Production and cost analysis, market structure, and labour market theory.

CO4: students are well acquainted with the principles of microeconomic theory, and ways in which the theory can be used in its applications of the real world.

Principles of Business Management(BC 103):

C01: Students are made aware about importance, scope & Evolution and components of commerce.

C02: Students come to know about characteristics & significance of management. Students are made aware about functions also.

C03: Learn about different approaches of management.

C04: Students are made aware about importance of planning, types of plain, vision, mission, strategy, goals and objectives.

C05: Students are made aware about organisational structures of large scale organisation..

C06: Students come to know about principles and barriers of delegation.

C07: Learn about importance & scope of staffing.

C08: Students are made aware about significance and approaches to motivation.

C09: Students come to know about significance of leadership and leadership styles.

C10: Students are made aware about process of controlling & different techniques of controlling.

Business Mathematics Paper code BC - 105

CO1 the students will be able to understand and answer on the topic of Logarithms, Antilogarithms.

CO2 Get knowledge on Sequences and Series: Arithmetic & Samp; Geometric Progressions.

CO3 Will be able to learn basics of Differentiation with its applications.

CO4 Will understand the concept of Matrices and Determinants and able to solve linear equations.

CO5 Students acquired knowledge of Compound Interest and Annuities and able to solve; problems relating this topic

Business Communication(BC 106):

C01: Students are made aware about different theories & processes of communication.

C02: Learn about process & significance of audience analysis.

C03: Students are made aware about different barriers to communication.

C04: Students come to know about terms:- group They become familiar aboution, mockinterview, seminar, report writing.

C05: Students are made aware about SWOT Analysis, Kinesics, Proxemics, Para language.

C06: Learn about principals of effective listening.

C07: Students able to frame own resume for seeking job in HRM Department of an organisation.

C08: Students learn to write a business letter to your customer for the payment of dues.

C09: Students are made aware about different Etiquettes in verbal, written and online communication.

Financial Accounting-H(BC 201):

C01: Students are made aware about the terms debtor system, stock and debtor system, wholesale branch.

- C02: Students come to know about the financial accounts of branch.
- C03: Learn about concept and legal provision regarding hire purchase contract.
- C04: Students come to know about the accounting record for goods of substantial sale value.
- C05: Students are made aware about characteristics of partnership and partnership deed.
- C06: Students come to know about accounting treatment of fixed and fluctuating capital, goodwill, joint life policy in partnership account.
- C07: Students are made aware about accounting treatment in case of admission and retirement of partner.
- C08: Students come to know about the accounting treatment of dissolution of partnership.

Macroeconomics (BC-202):

- C01: This paper introduces students to macroeconomic fundamentals and concepts, theories and applications with regard to variables such as GDP, consumption, savings, investment, money and banking, and balance of payments.
- C02: Students can apply the basic principles learnt from this paper in understanding the functioning of the aggregate economy, and in contributing to policy debates.

Fundamentals of Marketing(BC 203):

- C01: Students are made aware about the importance of principles of marketing and marketing management.
- C02: Students are made aware about different component of marketing mix.
- C03: Learn about different components of marketing environment
- C04: Students come to know about different basis of marketing segmentation.
- C05: Learn about importance and factors affecting consumer behaviour.
- C06: Students are made aware about classification of product.
- C07: Learn about factors affecting product mix and product line decision.
- C08: Students come to know about different stages of product life cycle.
- C09: Students are made aware about procedure of new product development.
- C10:Students will learn to elaborate branding, packaging and labeling.
- C11: Students are made aware about different factors and objectives of pricing.

- C12: Students will learn to elaborate pricing strategies.
- C13: Learn about elements of promotion mix.
- C14: Students are made aware about factors affecting choice of distribution channel.

Business Mathematics-II(BC - 205)

- CO1 the students will be able to understand and answer on the topic of Permutations and Combinations,
- CO2 Students able to understand basics of Binomial Theorem.
- CO3 Able to solve Linear inequalities and it's graphical solution.
- CO4 Able to learn about data representation and interpretation introduction and representation of data; significance of diagrams and graphs.

Course Outcome for B.Com II

- Corporate Accounting-I(BC 301):
- CO 1: Students are made aware about the procedure of issue and allotment of shares. Also They learn about the rules regarding the re-issue and forfeiture of shares.
- CO 2: They learn about the preference shares and their redemption procedure.
- CO 3: Learn about the issuance of debenture at par, discount and premium Pass the necessary journal entries under all the three cases by taking imaginary examples.
- CO 4: Learn about redemption of debentures and their characteristics and Students are made aware about their effects on accounts of the company.
- CO 5: Learn to prepare in a summarized form of the Balance Sheet of a company as per Companies Act, 2013, taking imaginary figures.
- CO 6: Students learn to state the conditions for amalgamation in nature of merger and journal entries in the books of transferor and Transferee Company in such type of amalgamation.
- CO 7: Learn about the Internal Reconstruction and entries to be made in the books of a company in this connection
- Business Statistics-I(BC 302):
- CO 1: "Statistics are numerical statements of facts in any department of enquiry and placed in relation to each other". Students learn to Comment and They become familiar about the characteristics of Statistics.

- CO 2: They learn to distinguish between 'primary data' and 'secondary data'. They become aware about how to collect data for the census in India and published in the census reports primary or secondary data.
- CO 3: Students are made aware about the mathematical properties of Arithmetic Mean Students get introduced about the relationship among Mean, Median and Mode
- CO 4: Students learn about the various measures of dispersion. Students are made aware about the relative merits and demerits of each.
- CO 5: Students are made aware about the Laspeyre's, Paasche's and Fisher's formula for computing an index number. Check which of them satisfies the time reversal and factor reversal tests.
- CO 6: Distinguish between fixed base and chain base methods of constructing index number and give their relative merits.
- CO 7: Compare the moving average and least square methods of measuring rend in a given time series.
- CO 8: Students are made aware about the method of fitting exponential trend.
- Business Law-I (BC 303):
- CO 1: Students are made aware about "Contract is an agreement enforceable by law".
- CO 2: Students are made aware about the terms 'offer' and 'acceptance'. Narrate rules regarding them.
- CO 3: Students learn the incompetency to contract and minor's contract.
- CO 4: Students learn to They learn about consent, when a consent is said to be free, its effects on the validity of contracts.
- CO 5: "No consideration no contract". Students learn to Comment on this statement and give exceptions of this rule.
- CO 6: They learn about void contract and various agreements that are expressly declared to be void by Indian Contract Act.
- CO 7: "It is necessary to observe the legal formalities for the validity of a contract". They learn to explain the statement and the legal formalities.
- CO 8: They learn the rules regarding the enforcement of contingent contracts.
- CO 9: Students are made aware about the rules regarding the person, time and place of performance in a contract.

- CO 10: Students learn to State the various ways in which a contract may be said to be discharged with suitable examples.
- CO 11: They will learn about a quasi contract and the types of quasi contracts.
- CO 12: Students are made aware about the different kinds of remedies available for breach of contract.
- CO 13: Students will be familiar about Contract of Indemnity and Guarantee.
- CO 14: Learn about the duties of a bailor and bailee and pledge, its main characteristics and rights and duties of Pledger and Pledgee.
- CO 15: "An agent cannot personally enforce contracts entered into by him on behalf of his principal, nor he is personally bound on them". Students learn to They become familiar about and enumerate the exceptions, if any.
- CO 16: Students will be familiar about 'Negotiable Instrument' and the rules regarding presentment for payment of a negotiable instrument.
- CO 17: Students learn about the essential elements of Contract of sale Students are made aware about the rules regarding determination of price in a contract of sale.
- CO 18: Students are made aware about the term conditions and warranties. They become familiar about the implied condition and warranties in a contract of sale.
- CO 19: "Nemodot quod non-habet". Students are made aware about this maxim and give exceptions, if any.
- CO 20: Students are made aware about the term "Delivery" and state the rules regarding valid delivery of goods.
- CO 21: "When is a seller of goods deemed to be unpaid seller?" Students learn about his rights against the goods and buyer personally.
- CO 22: Students learn about the remedies available to buyer and seller at the breach of contract of sale They become familiar about.
- CO 23: Consumer dispute redressal agencies can be established under the 'Consumer Protection Act, 1986. Students are made aware about the District Forum in detail.

Company Law-I (BC 304):

- CO 1: A company is a separate legal entity. Students learn to elucidate.
- CO 2: Students learn about the types of companies Students are made aware about.

- CO 3: They learn about a private company, privileges and exemptions or concessions are enjoyed by it under Companies Act, 2013.
- CO 4: Students are made aware about the steps to be taken or a procedure to be followed for the incorporation of a Public Company.
- CO 5: They learn about Memorandum of Association of a company and state its importance.
- CO 6: They become familiar about article of association. They learn about the limitations or restrictions regarding alteration of articles.
- CO 7: Students get introduced about prospectus.
- CO 8: Students get introduced about share capital in a company limited by shares. Students learn about the various classes of share capital
- CO 9: They learn about Share Certificate and state its contents. Students learn about the provisions relating to share certificate
- CO 10: Students are made aware about Alteration of Share Capital. Students learn about the legal provisions of alteration of share capital
- CO 11: Can shares be transferred without share certificate. Students get introduced about the difference between Transfer and Transmission of Shares
- CO 12: Students learn about the advantages of depository system.
- CO 13:. Students are made aware about the borrowing powers of a company
 - · Indian financial system (BC 305):
- CO1: They become familiar about the role of Indian financial system in economic development
- CO2: They become familiar about the main components of Indian Financial System.
- CO3: They learn about money market. Students are made aware about different money market instruments.
- CO4: Students learn why Indian money market is characterized as underdeveloped.
- CO5: Students learn about the recent developments in Indian Money Market.
- CO6: They learn about capital market. Students are made aware about in detail the capital market structure of India.
- CO7: Students understand about capital market and Learn about the various primary market instruments.

CO8: Indian capital market has been growing very fastly. Students learn about the major instruments traded on stock exchange Students learn about the recent development in Indian capital market

CO9: They become familiar about the role of SEBI in regulating Indian capital market. Students learn about the regulatory measures introduced by SEBI to regulate Indian capital market.

CO10: Students understand about Debt market. Students learn about its major characteristics Students are made aware about the debt market instruments.

C113: They learn about Reserve Bank of India. They become familiar about its various functions. They become familiar about the role of RBI in economic development of India.

CO12: Students are made aware about the organizational setup of RBI. What measures are taken by RBI for credit creation and credit control in India

CO13: They learn about commercial bank. Students learn about its functions Students learn about recent developments in Indian Commercial banking

CO14: Students are made aware about E-banking.

CO15: Students learn about functions and recent developments in development banking.

CO16: Students are made aware about various Development Financial Institutions working in India.

Rural Marketing (BC 306):

CO1: They learn about Rural marketing. Students learn about its distinct features

CO2: 'Concept of rural marketing is at evolutionary stage in India.' Students learn about the challenges being faced by rural markets in India

CO3: Students learn about the various factors affecting rural marketing in India Students are made aware about in detail.

CO4: Students get introduced about rural consumer behaviour, how rural markets are segmented Students are made aware about the various strategies for rural marketing.

CO5: Students are made aware about rural marketing mix. Students learn about the problems in rural marketing

CO6: Students are made aware about the process of product planning for rural markets.

CO7: Students get introduced about distribution channels Students are made aware about the various channels of distribution in rural markets.

Corporate Accounting-II (BC 401):

- CO 1: Students get introduced about goodwill valuation Students are made aware about the factors which Students are made aware about the valuation of goodwill. They become familiar about the methods which are used for goodwill valuation
- CO 2: Students are made aware about the need for valuation of shares. Students are made aware about dividend yield method and net assets methods of valuation of sharesand state their suitability in specific situations.
- CO 3: Students get introduced about holding company Students are made aware about the circumstances under which one company controls the other
- CO 4: Students are made aware about the schedules given in profit & loss account of banking company
- CO 5: Trace the commercial and legal background of insurance business. Students are made aware about the technique of preparation of the final accounts of life insurance and general insurance business.
- CO 6: Students get introduced about liquidation of a company Students learn about the various methods for winding up of a company

Business Statistics-II (BC 402):

- CO 1: They learn about correlation. Students are made aware about the various methods of studying correlation. They learn about Pearson's coefficient of correlation. Interpret r when r=1,-1 and 0.
- CO 2: Students learn to Distinguish between correlation and regression. How would they identify regression equation of X on Y and Y on X.
- CO 3: They learn about probability and Students are made aware about the importance of this concept in Statistics. Also state and prove Bayes' theorem
- CO 4: They understand by theoretical frequency distribution They become familiar about the important properties of Binomial and Poisson distribution.
- CO 5: They learn about normal distribution and binomial distribution and the properties of normal distribution with its importance.

Business Law-II (BC 403);

- CO 1: They learn to write meaning and features of negotiable instruments and Learn about the fundamental characteristics which distinguish a negotiable instrument from ordinary goods.
- CO 2: Students learn to Distinguish between cheque and bill of exchange. Students get introduced about a crossed cheque.
- CO 3: Students learn When is a payment made on a negotiable instrument said to be a payment in due course.
- CO 4: They learn Who can endorse a negotiable instrument They learn about different types of endorsement of negotiable instrument also.
- CO 5: They learn about partnership. Learn about the mutual relation of partners in a form where there is no contract of business.
- CO 6: Students learn how a partnership firm can be dissolved Students are made aware about fully the circumstances in which court may order for dissolution of a firm.
- CO 7: Students come to know If there is no provision in the partnership deed, how settlement of accounts of the firm be done after the dissolution of a firm
- CO 8: They become familiar about the procedure of getting a group of people incorporated as 'limited liability partnership'.
- CO 9: Students are made aware about the legal provisions regarding registration of change in name and address of the partners of limited liability partnership.
- CO 10: Students are made aware about the meaning of Computer Network. Students get introduced about the provision for legal recognition of electronic records under section 4 of the IT Act 2000
- CO 11: Learn about the salient features of Right to Information Act, 2005. Also Students are made aware about the procedure of obtaining information under Right to Information Act.

Company Law-II (BC 404):

- CO 1: They learn about members of a company. Also elaborate the term annual return.
- CO 2: How are directors appointed Students learn about the provisions under the Indian Companies Act, 2013 relating to the remuneration, vacation of office and removal of directors
- CO 3: They learn about a Company Secretary and state his legal and Actual Position.

- CO 4: Students get introduced about meant by 'Meeting' Who can call Extra-ordinary meeting
- CO 5: Students get introduced about meant by Quorum with the term 'Proxy'
- CO 6: They learn to mention the powers of National Company Law Tribunal to check oppression and management.
- CO 7: They learn to summaries the provision of the Companies Act pertaining to reconstruction and amalgamation of companies.
- CO 8: Students learn about winding up of the company with the different modes of winding up.
- CO 9: "No dividend can be paid, otherwise than out of the profits of the company". They become familiar about the statement.
 - Computerized accounting system (BC 405):
- CO 1: Students are made aware about the steps in in installing Tally ERP 9.
- CO 2: Students are made aware about the various steps followed for creation of cost centre in Tally ERP 9.
- CO 3: "how profit and loss account and balance sheet are created in Tally ERP 9". Students are made aware about with example.
- CO 4: Students are made aware about the following with suitable example:
 - stock item
 - purchase order
 - rejection out
- CO 5: Students learn to compute tax liability in tally ERP 9 Students are made aware about.
- CO 6: Students get introduced about payroll. Students are made aware about the following payroll vouchers
 - Overtime payment.
 - Gratuity
- CO 7: Students are made aware about various types of advanced payroll transactions with suitable example.
 - Entrepreneurship development (BC 406):
- CO 1: Students get introduced about entrepreneur Students are made aware about the role of entrepreneur in economic development.

- CO 2: They learn about entrepreneurship. Students learn about the qualities and prerequisites of Entrepreneurship
- CO 3: Students are made aware about in detail the life cycle of a new business and relationship with large Enterprises.
- CO 4: Students learn about the various factors affecting Success of a new business.
- CO 5: A business organization has to face various challenges in the market. Students are made aware about factors determine the success or failure of a new business.
- CO 6: They learn about feasibility study. How it is conducted
- CO 7: Students learn about the various sources of finance for a new business
- CO 8: Students get introduced about the role of government in promoting entrepreneurship in India
- CO 9: Students are made aware about:
 - Startup India
 - · Skill India.

Course Outcomes for B.Com III

- Cost Accounting (BC 501):
- CO 1: "Cost accounting is a branch of Financial Accounting and it has been evolved to do away the limitations of financial accounting and to meet the needs of management". They learn to Comment.
- CO 2: Students learn to tabulate the 'Element of Cost' showing the usual items of expenditure appertaining to each.
- CO 3: Students learn about the objects of material control State briefly the various methods for pricing the issue of materials.
- CO 4: Students get introduced about meant by material control Learn about its objectives and basic principles.
- CO 5: Students get introduced about idle time and how should it be treated in Cost Accounts
- CO 6: Students are made aware about the incentive plan in remuneration of labour Mention any four such methods giving their merits and demerits.
- CO 7: They learn about 'Overheads'. Students are made aware about fixed, variable and semi-variable overheads in detail.

- CO 8: Students get introduced about meant by Under/Over-absorption of overheads How will you account for them in your books Students are made aware about.
- CO 9: Students get introduced aboutMachine Hour Rate method Students are made aware about and Learn about its area of application and its advantages.
- CO 10: They learn to distinguish between a Cost Sheet and a Production Account. Draw a complete specimen form of a comparative cost sheet.
- CO 11: Students learn to determine tender price.
- CO 12: Students learn about the contract account and its preparation. Learn to give a specimen of such an account using imaginary figures.
- CO 13: "Job order costing method is a specific order costing method". Students are made aware about the statement.
- CO 14: Students are made aware about the working of Process Costing and give the salient features of the system. Also Students are made aware about normal wastage, abnormal wastage and abnormal effectiveness. How these should be dealt in process cost accounts
- CO 15: Students get introduced about Inter-Process profit How actual profit is calculated Students are made aware about with examples.
- CO 16: Students get introduced about meant by Equivalent Production in connection with the valuation of Work-in-Progress in process costing
- CO 17: Students learn to State the reasons for disagreement between the costing and financial results. Prepare an imaginary Reconciliation Statement.
- CO 18: Students get introduced about Operating Cost In which industries it is used Prepare a Transport Operating Cost Sheet with imaginary figures and They become familiar about the various items included in it.
- CO 19: Students get introduced about Standard Costing They become familiar about its advantages and application.
- CO 20: They learn about Standard Costing. They become familiar about 'Material Variance' and 'Labour Variance' with reference to it.
- CO 21: Differentiate between Cost Reduction and Cost Control. Students learn about the major areas in which cost reduction is usually possible
- Financial Management (BC 502):

- CO 1: They learn about financial management. They become familiar about its objectives and importance.
- CO 2: Students learn about factors affecting financial planning What steps should be taken in financial planning
- CO 3: "Both Over-Capitalisation and Under-Capitalisation are harmful to the financial interests of a company". Comment.
- CO 4: Students are made aware about the techniques used in financial forecasting.
- CO 5: Students learn about the sources of long-term finance of a company Students are made aware about each source in brief.
- CO 6: Students understand short-term sources of finance. Students are made aware about the different short-term sources of finance.
- CO 7: Students get introduced about the significance of cost of capital How do you calculate cost of debt, preference share capital and retained earnings
- CO 8: They learn about an optimum capital structure. How it can be achieved Students are made aware about the different approaches of capital structure.
- CO 9: Students get introduced about the nature of capital budgeting Students learn about various kinds of capital budgeting decisions
- CO 10: Students are made aware about with the help of a numerical example the procedure of estimating working capital requirement. Also They become familiar about the methods of analysis of working capital.

Goods and Services Tax (BC 503):

- CO 1: Students are made aware about tax structure in India after and before implementation of GST.
- CO 2: They become familiar about the salient features of GST.
- CO 3: Learn about administrative set up under CGST. Students are made aware about provisions related appointment of officers under CGST.
- CO 4: Students are made aware about deemed supply or activities to be treated as supply under GST Law.
- CO 5: Students are made aware about provisions related with levy and collection in case of supply by unregistered suppliers.
- CO 6: They learn about key features of the Composition Scheme.

- CO 7: Students learn to State the provisions related with time of supply of goods.
- CO 8: Students learn to write note on levy and collection under IGST.
- CO 9: They learn to write note on Inter and Intra-State Supply. They become familiar about provisions related with determination of nature of supply.
- CO 10: They become familiar about provisions related with place of supply of goods other than goods imported into, or exported from India.
- CO 11: Students are made aware about provisions related with value of taxable supply under GST Law.
- CO 12: They learn about input tax credit. Learn about the provisions related with eligibility and conditions for taking input tax credit.
- CO 13: Learn about persons liable for registration under GST with the provisions related with procedure for registration.
- CO 14: Students are made aware about types of invoices to deal different situations in GST Law.
- CO 15: Learn about return by person registered as an Input Service Distributor. Students are made aware about provisions related with filing of returns.
- CO 16: They become familiar about types of payments under GST. Students learn about the provisions related with Tax Deduction at Source
- CO 17: Students are made aware about offences and penalties under GST Law. Students are made aware about general disciplines related to penalty.

Income Tax-I (BC 504):

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- CO 1: "Income Tax is a tax on income and not receipts". They become familiar about this statement. Students learn about the basis and procedure of charging Income-Tax
- CO 2: Students get introduced about agriculture income Students learn about its kinds State ten incomes which are related to land but not agricultural income.
- CO 3: Students learn about the different categories into which the assesses are divided with regard to residence Give a brief account of each of them.
- CO 4: Students are made aware about the concept of 'Exempted Income'. They become familiar about clearly the 'Exempted income' under the Income Tax Act.
- CO 5: Students learn to calculate the value of rent-free house under the head income from salary
- CO 6: Students are made aware about the provisions of income tax regarding encashment of the earned leave.

- CO 7: Students get introduced about the term 'Annual Value of House Property' How would they determine the annual value of a house property which remained vacant for part of the previous year
- CO 8: What deductions are allowed to a businessman in computing profits Specify the expenses disallowed?
- CO 9: Students get introduced about a 'block of assets' Students get introduced about the method of computing the W.D.V. of a block of assets
- CO 10: They learn about the term 'Capital Gains' used in the Income Tax Act. Students learn about the rules regarding the exemption of Capital Gains
- CO 11: Learn about the method of computing income under the head 'Income from other Sources'.
- CO 12: Students learn about deemed incomes In what circumstances is the income of one person treated as an the income of another
- CO 13: Students are made aware about the provisions regarding carry-forward and set-off of losses

Subject: supply chain management (BC 506):

- CO 1: Students get introduced about supply chain management. Students are made aware about its scope.
- CO 2: Students learn about the various approaches to supply chain management Students are made aware about in detail.
- CO 3: supply chain management has become an important part of the industry and the economy. Students learn to Justify the statement.
- CO 4: Students are made aware about the role of supply chain management in marketing mix.
- CO 5: Students get introduced about integrated supply chain management Students are made aware about its total cost concept.
- CO 6: They learn about strategic supply chain management. They become familiar about the interrelationship between supply chain management and marketing.
- CO 7: Students are made aware about multimodal transportation. Which factors are considered by a company while selecting specific mode of transportation.
- CO 8: Students get introduced about warehousing Students are made aware about the process of warehouse selection by a company.

- CO 9: Students are made aware about the various channels of distribution in detail.
- CO 10: Students learn about the recent developments in supply chain management in India.

Subject: Auditing (BC 505):

- CO 1: They learn about auditing. Students are made aware about various objectives of auditing.
- CO 2: Students are made aware about the types of auditing. They become familiar about the advantages of auditing.
- CO 3: They learn about auditing program. Students get introduced about the process of auditing How the audit of transactions is conducted
- CO 4: Students are made aware about the various methods of auditing in detail.
- CO 5: Students are made aware about vouching of the following:
 - Cash hook.
 - Purchase book.
 - bills receivable book.
 - · debtor creditors ledgers.
- CO 6: Students learn how a company auditor appointed in a public limited company. Students learn about his powers.
- CO 7: Students learn about the various guidelines issued by the Comptroller and Auditor General of India for auditors Students are made aware about in detail.
- CO 8: They learn about audit report. Students learn about its various types
- CO 9: Students get introduced about the procedure of Investigation Students learn about its objectives
- CO 10: Students are made aware about professional ethics of auditing.

Management Accounting (BC 601):

- C01: Learn about techniques & significance of management accounting.
- C02: Students come to know about the needs and types of management reports.
- C03: Students are made aware about management information system.
- C04: Learn about different techniques of analysis of financial statement.
- C05: Identify the need and method of preparing cash flow statement and fund flow statement.
- C06: Learn about break even analysis; margin of safety.

C07: Learn about methods of Budgetary Control.

Fundamentals of Insurance (BC 602):

C01: Learn about importance and functions of life insurance.

C02: Learn about purpose & functions of general insurance.

C03: Students are made aware about different Principles of Insurance.

C04: Students come to know about rights & duties of parties to contract.

C05: Students are made aware about nominations & assignment, practices in premium, revivals loans surrenders in bonuses & annuity payments in life insurance.

C06: Students are made aware about claim settlement procedure of fire insurance.

C07: Learn about claim settlement procedure of Marine insurance.

C08: Learn about claim settlement procedure of accident & Motor insurance.

C09: Students are made aware about the code of conduct for Insurance agent. Students learn about unfair practices on the part of agent

Human Resource Management (BC 603):

C01: Students are made aware about the concept and objectives of human resource development.

Also Students are made aware about the benefits of human resource development.

C02: Outline the steps involved in human resource planning process. Learn about its objectives and importance.

C03: Students are made aware about the concept of job-analysis. Students learn about its advantages and problems

C04: Students are made aware about the various sources of recruitment.

C05: Students are made aware about the various steps in an effective selection process.

C06: Students are made aware about various training schemes in India.

C07: Students are made aware about various traditional and modern methods of evaluating the performance.

Income Tax-II (BC 604):

C01: Students come to know about deductions U/S 80C to 80U.

C02: Students are made aware about the computation of total income & tax liability of an individual.

C03: Students are made aware about the computation of total income & tax liability of firm.

- C04: Students come to know about a note on deduction of tax at source and advance payment of
- C05: Learn about powers of income tax authorities.
- C06: Students are made aware about procedure for assessment and different type of returns.
- C07: Learn about procedure for filling e- return and revised return.
- C08: Students are made aware about recovery and refund of tax.
- C09: Students come to know about different appeals to be made under income tax.

Business Environment (BC 605):

- C01: Learn about importance and components of business environment.
- C02: Students are made aware about public, private and joint sectors in India with examples.
- C03: Students come to know about the economic systems.
- C04: Students are made aware about economic planning's achievement and failures in India.
- C05: Learn about monetary policy and fiscal policy.
- C06: Students are made aware about Multinational Corporation in India.
- C07: Learn about globalization of Indian business.
- C08: Students are made aware about need, types and barriers of foreign investment.
- C09: Students come to know about competition Act.
- C10: Students come to know about foreign exchanges management Act (FEMA).
- C11: Learn about foreign exchange market.

Retail Management (BC 606):

- C01: Students are made aware about characteristics and importance of retail management.
- C02: Learn about theories of retailing.
- C03: Students are made aware about planning location of retail institution.
- C04: Students come to know about organisational structure in retail institutions.
- C05: Students are made aware about blueprinting operation, energy management, security issues of store management.
- C06: Students learn to write a note on applications of information technology in retailing.
- C07: Learn about FDI in retail.

Course outcome of B.com (CAV)

Course outcome of B.Com CAV I

Financial Accounting-1 (BC 101);

- C01: Students are made aware about need & scope of financial accounting.
- C02: Learn about accounting principles and conventions.
- C03: Students come to know about accounting equations.
- C04: Students are made aware about different rules of Journalising.
- C05: Learn about classification of income, expenditure and receipts.
- C06: Students are made aware about different methods of depreciation accounting.
- C07: Students are made aware about preparation of final accounts.
- C08: Students come to know about accounts of Non-profit organisation.
- C09: Students are made aware about calculation of normal & abnormal loss & valuation of unsold stock in Consignment Accounts.

Course outcome of Principles of Business Management (BC 103):

- C01: Students are made aware about importance, scope & Evolution and components of commerce.
- C02: Students come to know about characteristics & significance of management. Students are made aware about functions also.
- C03: Learn about different approaches of management.
- C04: Students are made aware about importance of planning, types of plain, vision, mission, strategy, goals and objectives.
- C05: Students are made aware about organisational structures of large scale organisation.
- C06: Students come to know about principles and barriers of delegation.
- C07: Learn about importance & scope of staffing.
- C08: Students are made aware about significance and approaches to motivation.
- C09: Students come to know about significance of leadership and leadership styles.
- C10: Students are made aware about process of controlling & different techniques of controlling.

Course outcome of Business Communication (BC106):

- C01: Students are made aware about different theories & processes of communication.
- C02: Learn about process & significance of audience analysis.
- C03: Students are made aware about different barriers to communication.
- C04: Students come to know about terms:- group They become familiar aboution, mockinterview, seminar, report writing.
- C05: Students are made aware about SWOT Analysis, Kinesics, Proxemics, Para language.

C06: Learn about principals of effective listening.

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C07: Students learn to Frame own resume for seeking job in HRM Department of an organization.

C08: Students learn to write a business letter to your customer for the payment of dues.

C09: Students are made aware about different Etiquettes in verbal, written and online communication.

• Financial Accounting- II (BC 201):

C01: Students are made aware about the terms debtor system, stock and debtor system, wholesale branch.

C02: Students come to know about the financial accounts of branch.

C03: Learn about concept and legal provision regarding hire purchase contract.

C04: Students come to know about the accounting record for goods of substantial sale value.

C05: Students are made aware about characteristics of partnership and partnership deed.

C06: Students come to know about accounting treatment of fixed and fluctuating capital, goodwill, joint life policy in partnership account.

C07: Students are made aware about accounting treatment in case of admission and retirement of partner.

C08: Students come to know about the accounting treatment of dissolution of partnership.

Fundamentals of Marketing (BC 203):

C01: Students are made aware about the importance of principles of marketing and marketing management.

C02: Students are made aware about different component of marketing mix.

C03: Learn about different components of marketing environment

C04: Students come to know about different basis of marketing segmentation.

C05: Learn about importance and factors affecting consumer behaviour,

C06: Students are made aware about classification of product.

C07: Learn about factors affecting product mix and product line decision.

C08: Students come to know about different stages of product life cycle.

C09: Students are made aware about procedure of new product development.

C10: Students learn to elaborate branding, packaging and labeling.

- C11: Students are made aware about different factors and objectives of pricing.
- C12: Students learn to elaborate pricing strategies.
- C13: Learn about elements of promotion mix.
- C14: Students are made aware about factors affecting choice of distribution channel.

Course Outcome of B.Com CAV II

Corporate Accounting-I (BC 301):

- CO 1: Students are made aware about the procedure of issue and allotment of shares. Also They learn about the rules regarding the re-issue and forfeiture of shares.
- CO 2: Students get introduced aboutpreference shares How are preference shares redeemed
- CO 3: Learn about the issuance of debenture at par, discount and premium Pass the necessary journal entries under all the three cases by taking imaginary examples.
- CO 4: Students learn about the various methods of redemption of debentures Learn about their characteristics and Students are made aware about their effects on accounts of the company.
- CO 5: Students learn to Prepare in a summarized form of the Balance Sheet of a company as per Companies Act, 2013, taking imaginary figures.
- CO 6: State the conditions for amalgamation in nature of merger. Give journal entries in the books of transferor and Transferee Company in such type of amalgamation.
- CO 7: Learn about the Internal Reconstruction What entries are made in the books of a company in this connection

Business Statistics-I (BC 302):

- CO 1: "Statistics are numerical statements of facts in any department of enquiry and placed in relation to each other". Students learn to Comment and They become familiar about the characteristics of Statistics.
- CO 2: Distinguish between 'primary data' and 'secondary data'. Are the data collected for the census in India and published in the census reports primary or secondary data
- CO 3: Students are made aware about the mathematical properties of Arithmetic Mean Students get introduced about the relationship among Mean, Median and Mode
- CO 4: Students learn about the various measures of dispersion. Students are made aware about the relative merits and demerits of each.

- CO 5: Students are made aware about the Laspeyre's, Paasche's and Fisher's formula for computing an index number. Check which of them satisfies the time reversal and factor reversal tests.
- CO 6: Students learn to distinguish between fixed base and chain base methods of constructing index number and give their relative merits.
- CO 7: Students learn to compare the moving average and least square methods of measuring rend in a given time series.
- CO 8: Students are made aware about the method of fitting exponential trend.
- Business Law-I (BC 303):
- CO 1: "Contract is an agreement enforceable by law". Students are made aware about the statement.
- CO 2: Students are made aware about the terms 'offer' and 'acceptance'. Narrate rules regarding them.
- CO 3: Students learn who can enter into contract Students get introduced about the effect on a contract of incompetency to contract They become familiar about the law relating to minor's contract.
- CO 4: They learn about consent, when consent is said to be free They become familiar about its effects on the validity of contracts.
- CO 5: "No consideration no contract". Students learn to Comment on this statement and give exceptions of this rule.
- CO 6: Students get introduced about void contract Briefly state the various agreement that are expressly declared to be void by Indian Contract Act.
- CO 7: "It is necessary to observe the legal formalities for the validity of a contract". Students learn about the legal formalities?
- CO 8: They become familiar about the rules regarding the enforcement of contingent contracts.
- CO 9: Students learn about the rules regarding to the person, time and place of performance Students are made aware about.
- CO 10: Students learn to state the various ways in which a contract may be said to be discharged with suitable examples.
- CO 11: Students get introduced about a quasi contract Mention the types of quasi contracts.

- CO 12: Students are made aware about the different kinds of remedies available for breach of contract.
- CO 13: Students get introduced about Contract of Indemnity and Guarantee Students get introduced about the difference between the two
- CO 14: Students learn about the duties of a bailor and bailee They learn about pledge and its main characteristics. They become familiar about rights and duties of Pledger and Pledgee.
- CO 15: "An agent cannot personally enforce contracts entered into by him on behalf of his principal, nor he is personally bound on them". They become familiar about and enumerate the exceptions, if any.
- CO 16: Students get introduced about meant by 'Negotiable Instrument' Students learn about the rules regarding presentment for payment of a negotiable instrument
- CO 17: Students learn about the essential elements of Contract of sale Students are made aware about the rules regarding determination of price in a contract of sale.
- CO 18: Students are made aware about the term conditions and warranties. They become familiar about the implied condition and warranties in a contract of sale.
- CO 19: "Nemodot quod non-habet". Students are made aware about this maxim and give exceptions, if any.
- CO 20: Students are made aware about the term "Delivery" and state the rules regarding valid delivery of goods.
- CO 21: When is a seller of goods deemed to be unpaid seller Students learn about his rights against the goods and buyer personally
- CO 22: Students learn about the remedies available to buyer and seller at the breach of contract of sale They become familiar about.
- CO 23: Consumer dispute redressal agencies can be established under the 'Consumer Protection Act, 1986' Students are made aware about the District Forum in detail.

Company Law-I (BC 304):

- CO 1: A company is a separate legal entity. Students learn to Elucidate.
- CO 2: Students learn about the types of companies Students are made aware about.
- CO 3: They learn about a private company. What privileges and exemptions or concessions are enjoyed by it under Companies Act, 2013

- CO 4: Students are made aware about the steps to be taken or a procedure to be followed for the incorporation of a Public Company.
- CO 5: They learn about Memorandum of Association of a company and state its importance.
- CO 6: They become familiar about article of association. They learn about the limitations or restrictions regarding alteration of articles
- CO 7: Students get introduced about prospectus and important points must be kept in mind while scanning a prospectus
- CO 8: Students get introduced about meant by share capital in a company limited by shares

 Students learn about the various classes of share capital
- CO 9: They learn about Share Certificate and state its contents. Students learn about the provisions relating to share certificate
- CO 10: Students are made aware about Alteration of Share Capital Students learn about the legal provisions of alteration of share capital
- CO 11: Can shares be transferred without share certificate Students get introduced about the difference between Transfer and Transmission of Shares
- CO 12: Students learn the working of depository system. Students learn about the advantages of depository system.
- CO 13: Students learn to Write the meaning and characteristics of debenture. Students are made aware about in detail the borrowing powers of a company

Corporate Accounting-II (BC 401):

- CO 1: Students get introduced about goodwill valuation Students are made aware about the factors which Students are made aware about the valuation of goodwill. They become familiar about the methods which are used for goodwill valuation
- CO 2: Students are made aware about the need for valuation of shares. Students are made aware about dividend yield method and net assets methods of valuation of sharesand state their suitability in specific situations.
- CO 3: Students get introduced about holding company Students are made aware about the circumstances under which one company controls the other
- CO 4: Students are made aware about the schedules given in profit & loss account of banking company

- CO 5: Students learn to trace the commercial and legal background of insurance business. Students are made aware about the technique of preparation of the final accounts of life insurance and general insurance business.
- CO 6: Students get introduced about liquidation of a company Students learn about the various methods for winding up of a company

Business Statistics-II (BC 402):

- CO 1: They learn about correlation. Students are made aware about the various methods of studying correlation. They learn about Pearson's coefficient of correlation. Interpret r when r=1,-1 and 0.
- CO 2: Students learn to Distinguish between correlation and regression. How would you identify regression equation of X on Y and Y on X
- CO 3: They learn about probability and Students are made aware about the importance of this concept in Statistics. Also state and prove Bayes' theorem
- CO 4: Students get introduced about theoretical frequency distribution They become familiar about the important properties of Binomial and Poisson distribution
- CO 5: Students learn to distinguish normal distribution from a binomial distribution and the properties of normal distribution with its importance.

Business Law-II (BC 403):

- CO 1: Students learn to Write meaning and features of negotiable instruments and Learn about the fundamental characteristics which distinguish a negotiable instrument from ordinary goods.
- CO 2: Students learn to Distinguish between cheque and bill of exchange. Students get introduced about a crossed cheque
- CO 3: Students learn when a payment is made on a negotiable instrument said to be a payment in due course
- CO 4: Students learn to whom can endorse a negotiable instrument They learn about different types of endorsement of negotiable instrument also.
- CO 5: They learn about partnership. Learn about the mutual relation of partners in a form where there is no contract of business.
- CO 6: Students learn How a partnership firm can be dissolved Students are made aware about fully the circumstances in which court may order for dissolution of a firm.

- CO 7: Students learn If there is no provision in the partnership deed, how settlement of accounts of the firm be done after the dissolution of a firm
- CO 8: They become familiar about the procedure of getting a group of people incorporated as 'limited liability partnership'.
- CO 9: Students are made aware about the legal provisions regarding registration of change in name and address of the partners of limited liability partnership.
- CO 10: Students are made aware about the meaning of Computer Network. Students get introduced about the provision for legal recognition of electronic records under section 4 of the IT Act 2000
- CO 11: Learn about the salient features of Right to Information Act, 2005. Also Students are made aware about the procedure of obtaining information under Right to Information Act.

Company Law-II (BC 404):

- CO 1: They learn about members of a company. Also elaborate the term annual return.
- CO 2: Students learn how are directors appointed Students learn about the provisions under the Indian Companies Act, 2013 relating to the remuneration, vacation of office and removal of directors
- CO 3: They learn about a Company Secretary and state his legal and Actual Position.
- CO 4: Students get introduced about meant by 'Meeting' Who can call Extra-ordinary meeting
- CO 5: Students get introduced about meant by Quorum with the term 'Proxy'
- CO 6: Mention the powers of National Company Law Tribunal to check oppression and management.
- CO 7: Students learn to summarise the provision of the Companies Act pertaining to reconstruction and amalgamation of companies.
- CO 8: Students learn about winding up of the company with the different modes of winding up
- CO 9: "No dividend can be paid, otherwise than out of the profits of the company". They become familiar about the statement.

Course outcome of B.Com CAV III;

Cost Accounting (BC 501):

- CO 1: "Cost accounting is a branch of Financial Accounting and it has been evolved to do away the limitations of financial accounting and to meet the needs of management". Students learn to Comment.
- CO 2: Students learn to tabulate the 'Element of Cost' showing the usual items of expenditure appertaining to each.
- CO 3: Students learn about the objects of material control State briefly the various methods for pricing the issue of materials.
- CO 4: Students get introduced about meant by material control Learn about its objectives and basic principles.
- CO 5: Students get introduced about idle time and how should it be treated in Cost Accounts
- CO 6: Students are made aware about the incentive plan in remuneration of labour Mention any four such methods giving their merits and demerits.
- CO 7: They learn about 'Overheads'. Students are made aware about fixed, variable and semi-variable overheads in detail.
- CO 8: Students get introduced about meant by Under/Over-absorption of overheads How will you account for them in your books Students are made aware about.
- CO 9: Students get introduced about Machine Hour Rate method Students are made aware about and Learn about its area of application and its advantages.
- CO 10: Distinguish between a Cost Sheet and a Production Account. Draw a complete specimen form of a comparative cost sheet.
- CO 11: Students learn how tender price determined is.
- CO 12: Students learn about the contract account how is it prepared Give a specimen of such an account using imaginary figures.
- CO 13: "Job order costing method is a specific order costing method". Students are made aware about the statement.
- CO 14: Students are made aware about the working of Process Costing and give the salient features of the system. Also Students are made aware about normal wastage, abnormal wastage and abnormal effectiveness. How these should be dealt in process cost accounts.
- CO 15: Students get introduced about Inter-Process profit How actual profit is calculated Students are made aware about with examples.

- CO 16: Students get introduced about meant by Equivalent Production in connection with the valuation of Work-in-Progress in process costing
- CO 17: State the reasons for disagreement between the costing and financial results. Prepare an imaginary Reconciliation Statement.
- CO 18: Students get introduced about Operating Cost In which industries it is used Prepare a Transport Operating Cost Sheet with imaginary figures and They become familiar about the various items included in it.
- CO 19: Students get introduced about Standard Costing They become familiar about its advantages and application.
- CO 20: They learn about Standard Costing. They become familiar about 'Material Variance' and 'Labour Variance' with reference to it.
- CO 21: Students learn to differentiate between Cost Reduction and Cost Control. Students learn about the major areas in which cost reduction is usually possible
- Financial Management (BC 502):
- CO 1: They learn about financial management. They become familiar about its objectives and importance.
- CO 2: Students learn about factors affecting financial planning What steps should be taken in financial planning
- CO 3: "Both Over-Capitalization and Under-Capitalization are harmful to the financial interests of a company". Students learn to comment.
- CO 4: Students are made aware about the techniques used in financial forecasting.
- CO 5: Students learn about the sources of long-term finance of a company Students are made aware about each source in brief.
- CO 6: Students get introduced about short-term sources of finance Students are made aware about the different short-term sources of finance.
- CO 7: Students get introduced about the significance of cost of capital How do you calculate cost of debt, preference share capital and retained earnings
- CO 8: They learn about an optimum capital structure. How it can be achieved Students are made aware about the different approaches of capital structure.
- CO 9: Students get introduced about the nature of capital budgeting Students learn about various kinds of capital budgeting decisions

CO 10: Students are made aware about with the help of a numerical example the procedure of estimating working capital requirement. Also They become familiar about the methods of analysis of working capital.

Goods and Services Tax (BC 503):

- CO 1: Students are made aware about tax structure in India after and before implementation of GST.
- CO 2: They become familiar about the salient features of GST.
- CO 3: Learn about administrative set up under CGST. Students are made aware about provisions related appointment of officers under CGST.
- CO 4: Students are made aware about deemed supply or activities to be treated as supply under GST Law.
- CO 5: Students are made aware about provisions related with levy and collection in case of supply by unregistered suppliers.
- CO 6: They learn about key features of the Composition Scheme.
- CO 7: Students learn to State the provisions related with time of supply of goods.
- CO 8: Students learn to write note on levy and collection under IGST.
- CO 9: Students learn to write note on Inter and Intra-State Supply. They become familiar about provisions related with determination of nature of supply.
- CO 10: They become familiar about provisions related with place of supply of goods other than goods imported into, or exported from India.
- CO 11: Students are made aware about provisions related with value of taxable supply under GST Law.
- CO 12: They learn about input tax credit. Learn about the provisions related with eligibility and conditions for taking input tax credit.
- CO 13: Learn about persons liable for registration under GST with the provisions related with procedure for registration.
- CO 14: Students are made aware about types of invoices to deal different situations in GST Law.
- CO 15: Learn about return by person registered as an Input Service Distributor. Students are made aware about provisions related with filing of returns.
- CO 16: They become familiar about types of payments under GST. Students learn about the provisions related with Tax Deduction at Source

CO 17: Students are made aware about offences and penalties under GST Law. Students are made aware about general disciplines related to penalty.

Income Tax-I (BC 504):

- CO 1: "Income Tax is a tax on income and not receipts". They become familiar about this statement. Students learn about the basis and procedure of charging Income-Tax
- CO 2: Students get introduced about agriculture income Students learn about its kinds State ten incomes which are related to land but not agricultural income.
- CO 3: Students learn about the different categories into which the assesses are divided with regard to residence Give a brief account of each of them.
- CO 4: Students are made aware about the concept of 'Exempted Income'. They become familiar about clearly the 'Exempted income' under the Income Tax Act.
- CO 5: Students learn how the value of rent-free house is calculated under the head income from salary.
- CO 6: Students are made aware about the provisions of income tax regarding encashment of the earned leave.
- CO 7: Students get introduced about the term 'Annual Value of House Property' and determine the annual value of a house property which remained vacant for part of the previous year.
- CO 8: Students learn what deductions are allowed to a businessman in computing profits Specify the expenses disallowed?
- CO 9: Students get introduced about a 'block of assets' Students get introduced about the method of computing the W.D.V. of a block of assets
- CO 10: They learn about the term 'Capital Gains' used in the Income Tax Act. Students learn about the rules regarding the exemption of Capital Gains
- CO 11: Learn about the method of computing income under the head 'Income from other Sources'.
- CO 12: Students learn about deemed incomes In what circumstances is the income of one person treated as an the income of another
- CO 13: Students are made aware about the provisions regarding carry-forward and set-off of losses

Management Accounting (BC 601):

- C01: Learn about techniques & significance of management accounting.
- C02: Students come to know about the needs and types of management reports.
- C03: Students are made aware about management information system.
- C04: Learn about different techniques of analysis of financial statement.
- C05: Identify the need and method of preparing cash flow statement and fund flow statement.
- C06: Learn about break even analysis; margin of safety.
- C07: Learn about methods of Budgetary Control.

Fundamentals of Insurance (BC 602):

- C01: Learn about importance and functions of life insurance.
- C02: Learn about purpose & functions of general insurance.
- C03: Students are made aware about different Principles of Insurance.
- C04: Students come to know about rights & duties of parties to contract.
- C05: Students are made aware about nominations & assignment, practices in premium, revivals loans surrenders in bonuses & annuity payments in life insurance.
- C06: Students are made aware about claim settlement procedure of fire insurance.
- C07: Learn about claim settlement procedure of Marine insurance.
- C08; Learn about claim settlement procedure of accident & Motor insurance.
- C09: Students are made aware about the code of conduct for Insurance agent. Students learn about unfair practices on the part of agent

Human Resource Management (BC603):

- C01: Students are made aware about the concept and objectives of human resource development.
- Also Students are made aware about the benefits of human resource development.
- C02: Students learn to Outline the steps involved in human resource planning process. Learn about its objectives and importance.
- C03: Students are made aware about the concept of job-analysis. Students learn about its advantages and problems
- C04: Students are made aware about the various sources of recruitment
- C05: Students are made aware about the various steps in an effective selection process.
- C06: Students are made aware about various training schemes in India.
- C07: Students are made aware about various traditional and modern methods of evaluating the performance.

B.A/B.Sc (NM and CS)

Programme Specific Outcomes (Mathematics)

<u>PSO1:</u> Develops analytical abilities for data analysis which requires percentage, average, regression, linear expressions.

PSO2: Enable to approach problems in analytical way, formulate theories and apply them to solve problems.

<u>PSO3:</u> Enable to arrange things or actions in a certain order or pattern according to a specific rule or set of rules.

PSO4: Improves the logical reasoning, enhances the critical thinking and investigating skills.

PSO5: Provides basic knowledge to understand coding theory, image processing.

PSO6: Enables higher studies and research in the field of Mathematics.

<u>PSO7:</u> Offers job opportunities in teaching, cryptography, mathematical modelling.

<u>PSO8:</u> Understand various real- world problems, expresses through mathematical models and solves through various analytical and numerical methods.

<u>PSO9:</u> Gives the capability to build career as Numerical Analyst, Statistician, Market researcher, Computer programmer, information technologist etc.

<u>PSO10:</u> Helps to understand various natural phenomena like simple harmonic motion, motion of celestial bodies.

<u>PSO11:</u> Teaching: A mathematics Graduate can works as teacher in school and can run their own coaching centre.

PSO12: Base for Higher Study: Enable the students for higher studies and research in the field of Mathematics, Statistics, Operational Research.

<u>PSO13</u>: Wide career prospects: There is a demand of mathematics students in fields as statistics, engineering, computer science, insurance, economics, astronomy, banking and accounts.

PSO14: Competitive Exam: A student of mathematics is good in logical reasoning and basic maths, there fore able to clear competitive exam.

COURSE OUTCOME OF MATHEMATICS BA /B SC (NM & CS)

(ALGEBRA)

Paper code: BM -- 111

- CO 1: Algebra makes the students being able to understand and answer on the topics of matrices and their uses. Algebra helps the students transfer their mathematical knowledge to more algebraic generalizations.
- CO 2: Students will solve problems using equations, graphs and tables to investigate linear relationships. Also, students will be able to use Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations.
- CO 3: Also, it develops the ability of finding Relations between the roots and coefficients of general polynomial equation in one variable. And it deals with the solutions of quadratic, cubic and Biquadratic equations.

(CALCULUS)

Paper code: BM - 112

- CO 1: Calculus gives the students ability to understand the basic properties of limit, continuity and differentiation.
- CO 2: Students will learn different forms of Maclaurin and Taylor series expansions, different type of asymptotes and curvature and about tracing of different types of curves, reduction formulae and Rectification.
- CO 3: Students will be able to calculate Quardrature (area), Sectorial area and area bounded by closed curves. Volumes and surfaces of solids of revolution.
- CO 4: Learn about anti-derivative and the fundamental theorem of calculus and its applications, to use concept of integration to evaluate geometric area and solve other applied problems

(SOLID GEOMETRY)

Paper code: BM - 113

- CO 1: Solid Geometry deals with the geometry of the 3D surfaces like sphere, cone, cylinder, paraboloid. In this we identify, describe, compare and classify different geometric solids and visualize and represent geometric figures with special attention to spatial relationship
- CO 2: After completing this course of B.Sc., the students will be able to understand and answer on the formation of these surfaces and some other geometric features of these surfaces.
- CO 3: From this paper, the students learn the tracing of 2D and 3D surfaces also. Develop an appreciate of geometry and means of describing physical world.

(NUMBER THEORY AND TRIGONOMETRY)

Paper code: BM - 121

- CO 1: from this course, the students will be able to find quotients and remainders from integral divison.
- CO 2: They will learn about different concepts of Congruence and related theorems and different tyes of functions such as Greatest integer function [x], The functions d(n) and $\sigma(n)$). Mobius function and Mobius inversion formula.
- CO 3: Also, they will be able to know about De Moivre's Theorem and its Applications, Expansion of trigonometrical functions, Direct circular and hyperbolic functions and their properties, Inverse circular and hyperbolic functions and their properties, Logarithm of a complex quantity, Gregory's series, Summation of Trigonometry series.

(ORDINARY DIFFERENTIAL EQUATIONS)

Paper code: BM - 122

- CO 1: Ordinary differential equation makes the students being able to understand and answer on the Geometrical meaning of a differential equation, Exact differential equation and solutions of different type of linear and non linear differential equations.
- CO 2: As many of the real world phenomena are expressible in terms of differential equations and from this paper, the students learn to solve different mathematical models written in terms of ordinary differential equations.
- CO 3: Also, students learn the concepts of integration from this paper. Identify a general method for constructing solutions to inhomogeneous linear constant coefficient second-order equations.

(VECTOR CALCULUS)

Paper code: BM - 123

- CO 1: Vector Calculus is widely used in engineering mathematics. The students will be able to understand and answer about vectors, product of vectors, directional derivatives, Gradient, divergence and curl related concepts.
- CO 2: Further, this paper helps the students to find line, surface and the volume integrals of the surfaces. This paper has lots of importance in physics and other applied branches of Mathematics.
- CO 3: Vector Calculus helps us to understand how to mathematically describe physical and abstract quantities that have both magnitude and direction, increases knowledge of properties of functions whose domain consists of real numbers and range consists of vectors including differentiation and integration.

BM - 231 Advanced Calculus

- CO 1: The students will be able to understand concepts of Continuity. Uniform continuity, differentiation.
- CO 2: They will learn about geometrical interpretations and problem solving on Darboux, MVT, Rolle's Theorem and Taylor's Theorem with various forms of remainders.

CO 3: Also, they will be able to find limit and continuity. Partial differentiation, extremom of real valued functions of two variables, properties of Homogenous functions, various concepts of curves and surfaces in differential geometry.

BM - 232 Partial Differential Equations

- CO 1: After completing this course, students will be able to understand Partial differential equations, Formation, order and degree, Linear and Non-Linear Partial differential equations.
- CO 2: The students learn different type of techniques for investigating the linear partial differential equations in one and two dimensions such as Laplace's equation. Wave equation (one and two dimensions), Diffusion (Heat) equation (one and two dimension) in Cartesian Coordinate system.
- CO 3: Students will be able to expand one variable functions in series along basis of orthogonal functions.

BM - 233 Statics

- CO 1: Students will be able to understand Composition and resolution of forces. Parallel forces. Moments and Couples, Analytical conditions of equilibrium of coplanar forces.
- CO 2: Demonstrate understanding of principle of kinematics and kinetics of particles and planar rigid body and identify techniques for measurement using instrumentation with recognition of the principle of data collections.
- CO 3: Friction. Centre of Gravity, Virtual work. Forces in three dimensions. Poinsots central axis, Wrenches. Null lines and planes. Stable and unstable equilibrium.

CO10:BM - 241 Sequences and Series

- CO 1: The students will be able to understand Boundedness of the set of real numbers: least upper bound, greatest lower bound of a set, neighbourhoods, interior points, isolated points. Fimit points, open sets, closed set, interior of a set, closure of a set in real numbers and their properties.

 CO 2: Bolzano-Weiestrass theorem, Open covers, Compact sets and Heine-Borel Theorem and Sequence: Real Sequences and their convergence, Theorem on limits of sequence. Bounded and monotonic sequences, Cauchy's sequence, Cauchy general principle of convergence, Subsequence's, Subsequentially limits, Infinite series: Convergence and divergence of Infinite Series, Comparison Tests of positive terms Infinite series, Cauchy's general principle of Convergence of series, Convergence and divergence of geometric series.
- CO 3: Hyper Harmonic series or p-series, also Infinite series: D-Alembert's ratio test, I'm be's test, Logarithmic test, de Morgan and Bertrand's test, Cauchy's Nth root test. Gaussiant, Cauchy's integral test, Cauchy's+ condensation test, Alternating series. Leibnitz's test, all bet and conditional convergence, Arbitrary series: Abel's lemma, Abel's test, Dirichlet's the Insertion and removal of parenthesis, re-arrangement of terms in a series. Dirichlet's the analysis of the conditional convergence, Arbitrary series: Abel's lemma, Abel's test, Dirichlet's the conditional convergence, Arbitrary series: Abel's lemma, Abel's test, Dirichlet's the conditional convergence, Arbitrary series: Abel's lemma, Abel's test, Dirichlet's the conditional convergence, and conditional convergence, Arbitrary series: Abel's lemma, Abel's test, Dirichlet's the conditional convergence, and conditional convergence, Arbitrary series: Abel's lemma, Abel's test, Dirichlet's the conditional convergence, and conditional convergence, Arbitrary series: Abel's lemma, Abel's test, Dirichlet's the conditional convergence, and conditional convergence, arbitrary series conditional convergence, and conditional convergence, arbitrary series conditional convergence, and conditional convergence, arbitrary series conditional convergence, arbitrary

Riemann's Re-arrangement theorem, Pringsheim's theorem (statement only). Multiplication of series, Cauchy product of series, (definitions and examples only) Convergence.

BM - 242 Special Functions And Integral Transforms

- CO 1: The course deals with the study of different functions, polynomials, different transformations and their applications for solving ordinary differential equations and differential equations.
- CO 2: Students will be able to demonstrate a sound understanding of elementary functions, analytically Cauchy Riemann equations.
- CO 3: After completing this course, students will be able to understand Series solutions of differential equations, Beta and Gamma functions, Bessel equation, Legendre and Hermite functions, Laplace transforms, Fourier transforms.

CO12: BM - 243 Programming in C & Numerical Methods

- CO 1: The students will be able to understand Programmer's model of a computer. Algorithms, Flow charts, Data types, Operators and expressions, Input / outputs functions. Decisions and structure: Decision statements, Logical and conditional statements, Implementation of Loops, Switch Statement & Case control structures. Functions, Pre-processors and Arrays. Strings: Character Data Type, Standard String handling Functions, Arithmetic Operations on Characters.
- CO 2: Structures: Definition, using Structures, use of Structures in Arrays and A. Structures. Pointers: Pointers Data type, Pointers and Arrays, Pointers and Functions. Solve of Algebraic and Transcendental equations: Bisection method. Regula-Falsi method.
- CO 3: Newton's iterative method for finding pth root of a number. Order of convergence of above methods. Simultaneous linear algebraic equations: Gauss-elimination method.

 Jordan method, Triangularization method (LU decomposition method). Crout's a sol, Cholesky Decomposition method. Iterative method, Jacobi's method. Gauss-Seidal's need. This enables to understand various real- world problems, expresses through mathematical models and solves through various analytical and numerical methods.

Paper-BM:351, Real analysis

- CO 1: The students understands Riemann integral integrability of continuous and more functions, the fundamental theorem of integral calculus, mean value theorems of its all calculus, improper integral and their convergence comparison tests labels and Drichlets in the Frullani's integral integral as a function of parameters.
- CO 2: They will be able to define and understand the series of real numbers as convergence. Students will be able to use the Bolzano Weistrass Theorem.

CO 3: Understanding of continuity of real functions and differentiability of real functions with its related theorems.

Paper-BM:352, Groups and Rings

- CO 1: The students will be able to understand the importance of algebraic properties, as up structures to finite permutation groups, group generators with specific conditions. Syr as y using group theory.
- CO 2: The students learn group homomorphism, ring homomorphism, Euclidean Domain, Unique Factorization Domain, principal Ideal domain, polynomial Rings.
- CO 3: Recognition of rings, subrings, integral domain and fields, characterstics of a rine and quotient rings.

CO15: Paper-BM:353, Numerical analysis

- CO 1:Numerical analysis deals with the study of various numerical methods. As many of the non-linear problems does not have an exact solution and in particular, it is too difficult to the exact solution. So, in such cases, only approximate solution can be obtain with the hel of numerical methods.
- CO 2: The course aims at familiarizing the students with difference operators, interpolation with equal and unequal intervals, central difference interpolation, probability distribution of a variables, numerical integration, numerical solution of ordinary differential equations.
- CO 3: The students should be shown the ability of working independently and with groups.

Paper :BM-361,real and complex analysis

- CO 1: The students will be able to understand the , Jacobians, Beta and Gama functions. The and triple integrals , Drichlet integrals, change of order of integration in double integrals.
- CO 2: Fourier series: Fourier expansion of piecewise monotonic functions, properties of finarier coefficients, Drichlets condition. Parseval identity for Fourier series fourier series for even and odd functions. Half range series ,change of intervals ,extended complex plane stereons of exprojection of complex numbers, continuity and differentiability of complex functions of extended complex functions.
- CO 3: They also learn mapping by elementary functions: Translation Rotation Magnilla on and Inversion Conformal mappings, Mobius transformations, fixed point cross ratio appings, critical mapping.

BM-362,Linear Algebra,

- CO 1: The students will know about vector spaces and subspaces sum and direct sum of subspaces, linear span, linear dependence and independence finite dimensional vector spaces, invariance of the number of elements of basis sets dimensions agnotical space and its dimension, homomorphism and isomorphism of vector spaces.
- CO 2: The students learn linear transformation and linear forms of vector spaces, don't spaces and bidual spaces, null space and range space of a linear transformation, rank and salling theorem, algebra of linear transformations, minimal polynomial of linear transformations.
- CO 3: The students learn inner product spaces, Cauchy-schwarz inequality orthogonal vectors, orthogonal complements, orthogonal sets and basis, Bessel inequality of finite dimensional vector spaces, Gram-Schmidt orthogonalization process, adjoint of linear transformation as properties, Unitary linear transformations.

Paper: BM-363, Dynamics

- CO 1: The students know about velocity and accertation along radial, transverse stanger tickered normal directions.
- CO 2: They also understands relative velocity and accertation, simple harmonic motion activities strings, mass, momentum and force, Newtons laws of motion, work power and energy, definition of conservative forces and impulsive forces, motion on smooth and rough plane curves.
- CO 3: The students learn projectile motion of the particle in plane, vector angular we may general motion of the rigid body: Central orbits, Keplers law of motion, motion of the particle in three dimensions, accertation in terms of different co-ordinate systems.

BBA-104: Business Mathematics-I

After completing this course

CO1 students will be able to understand and solve the problems related to Set theory, logical statements and truth tables.

CO2 Students able to solve linear and quadratic equations.

CO3 Students learn about Permutations and combinations. Binomial theorem.

CO4 will gain knowledge on the topic Limit and continuity, differential calculus (including maxima and minima; excluding trigonometric functions),

CO5 Learn detailed knowledge of Matrices and determinate: solution to linear equations by using Cramer's rule and matrix inversion method.

BBA-112: Business Mathematics-II

CO1 students will be able to understand and solve the problems related to Plane Analytical Geometry.

CO2 Learn about on Arithmeticrithmetic, geometric and harmonic progressions.

CO3 Obtain knowledge on ntegral calculus, definite integral and its application in business.

Learn the basics of Logarithm, Law of operations, log tables,

CO4 Will able to learn practical problems of compound interest.

FOR B.COM.

(BUSINESS MATHEMATICS-I)

Paper code BC - 105

COI the students will be able to understand and answer on the topic of Logarithms, Antilogarithms.

CO2 Get knowledge on Sequences and Series: Arithmetic & Geometric Progressions.

CO3 Will be able to learn basics of Differentiation with its applications.

CO4 Will understand the concept of Matrices and Determinants and able to solve dinear equations. CO5 Students acquired knowledge of Compound Interest and Annuities and able to solve; problems relating this topic

CO8(BUSINESS MATHEMATICS-II)

Paper code: BC - 205

CO1 the students will be able to understand and answer on the topic of Permutations and Combinations,

CO2 Students able to understand basics of Binomial Theorem.

CO3 Able to solve Linear inequalities and it's graphical solution.

CO4 Able to learn about data representation and interpretation introduction and representation of data: significance of diagrams and graphs.

COURSE OUTCOME OF MATHEMATICS BCA

Mathematical Foundation-I for BCA 1st sem

- CO1 The students will be able to understand sets, subsets and operations on set.
- CO2 Able to solve problems related to permutation and combinations.
- CO3 Get knowledge on Boolean algera.
- CO4 Able to understand the concept of continuity and differentiability of functions.
- CO5 Acquire knowledge on differential equations, ordinary differential equations, and it's application to geometry.

Mathematical Foundation-II for BCA 2nd sem

- CO1 The students will understand the concept of propositions and logical operators, Truth table and propositions generated by a set, laws of logics.
- CO2 Aquire knowledge on Mathematical inductions,
- CO3 Able to get detailed knowledge of group theory.
- CO4 obtained knowledge of Rings Theory.
- CO5 Come to know about addition and multiplication of matrices, singular and non singular matrices, Rank of matrix, system of linear equations.
- CO6 Able to understand the concept of eigen value and eigen vectors of matrix, calaey hamilton theorem and diagonalization of matrix.

Computer -Oriented Numerical 236:

- CO1 The students will be able to understand the different numerical methods to solve the linear and quadratic equations and iterative methods.
- CO2 Able to understand the solution of simultaneous linear equations and ordinary differential equations.
- CO3 Will able to solve problems related to Numerical differentiation and integrations. Trapezoidal and Simpson rule.

Elements of Computer Oriented Statistical Methods for BCA 4th sem:

CO1 The students are able to understand basic concepts of statistics and measure of dispersion.

CO2 Aquire knowledge on the topic frequency distribution, moments and moments generating function

CO3 Students able to understand the probability distributions: normal, binomial, Poisson distribution, correlation and regression,

CO4 Able to apply z-test, chi square test, curve fitting and Anova method.

DEPARTMENT OF HISTORY, GOVT P G COLLEGE, AMBALA CANTT

Course Outcome

B. A. (General) Semester System History (Option – I & II)

B. A. General Course in History is a three years degree course consisting of six semesters. There shall be two Optional Papers in each Semester 1°, 2°, 3°, 4°, 5° and 6°. The Candidate shall take any one of the two Optional Papers in each Semester. The Candidate who may select Option- i in Semester-I will continue to select the Option-i in the Semester-I will continue to select Option-ii in the Semester-I will continue to select the Option- ii in the Semester-I will continue to select the Option- ii in the Semester-I will carry 100 marks out of which 20 marks shall be earmarked for Internal Assessment

Subject: History (Option – i & ii) BA I Semester I
Nomenclature of PaperAncient India (From Earliest Times to Gupta Age)
Nomenclature of PaperOption-ii History of Haryana (From Harappan Age to 1526 A.D.)

B. A. (General) History Semester System Part – I, Semester – II Option-i History of India (600-1526 A.D.) Option-ii History of Haryana (1526-1966 A.D.)

B. A. History Programme Outcomes:

- There are different scopes in different areas like sericulture department as demonstrator, care taker of the farm, trainer for others, etc.
- Archeologist: Archeological Survey of India with private Firms related to archeology.
- Historian: With so much debate over the authenticity of historical books, there is ever increasing demand for historians.
- Public Service: for history graduates, the option of public service like UPSC, HPSC, Banking, Police Department, Army, etc. are always opened.
- Teacher: After BA in history one can always find employment as a history/social science teacher.
- Social Worker/Subject Expert: Nowadays a lot of publishing houses seek subject matter experts for the publication of school textbooks or supplementary reading materials.
- Travel and Tourism Expert: With an extensive knowledge of history and Historical monuments, history graduates can work as a travel expert for tourism spot of historical importance.

Programme Specific Outcomes: To introduce the students to the major element of politics and administration in Ancient India. It intends to present and overview of changes in historical context. A few introductory lectures on the Meaning and Scope of History, Sources of Ancient Indian History, Pre-Historic Age: Hunter Gatherers Concept of Neolithie: Origin of the

Agriculture System, Harappan Civilization: Origins, Extent, Town Planning, Economy, Society, Arts and Political Organization, Vedic Culture: Polity, Society, Religion and Literature Social Institutions: Varna, Caste, Untouchability and Gender Relations Emergence of State with special reference to the Rise of Magada Empire Religious Movements: Buddhism and Jainism, Mauryan Empire: Polity, Administration; Ashoka's Dhamma- Nature and Propagation Post-Mauryan Empires: Kushanas and Satvahanas Gupta Empire: State, Administration, Society, Economy, Urban Centers, Art and Architecture would be required to commence the paper.

The syllabus is divided in two semesters and in second semester of Option (i) it intends to present and overview of Post-Gupta Period up to 750 A.D. (Pushyabhutis and Chalukyas Polity and Economy with special reference to Indian Feudalism (750- 1206 A.D.)) with Tri-Parties Struggle among Pratiharas, Palas and Rashtrakutas Polity and Administration of Cholas, Socio-Cultural Trends: Society, Culture and Literature during 600-1206 A.D. Invasions of Mahmud Ghaznavi and Muhammad Ghori - Causes of Success and Effects Emergence of Delhi Sultanate: Iltutmish, Balban, Ala-ud-din Khilji and Muhammad Tughlaq Bahmani and Vijaynagar Kingdoms: Polity, Administration and Economy Fall and Fragmentation of Delhi Sultanate. Delhi Sultanate: Political and Administrative Institutions, Ruling Groups Economic Developments during 1206-1526 A.D.: Agriculture, Industry, Trade and Commerce Art and Architecture during the Sultanate Period Society and Culture: Bhakti and Sufi Movements. With this students introduced to important Sites of Harappan Civilization Ports and Urban Centers in Ancient India Ashoka's Empire: Extent, Pillars and Edicts Extent of Kanishka's Empire Extent of Samudragupta's Empire and Extent of Harsha's Empire Extent of Ala-ud-din Khiji's Empire Extent of Muhammad Tughlaq's Empire Extent of Vijaynagar Empire Urban Centers under the Delhi Sultanate

Course Outcomes: After completing the course the students will be able to:

- List the sources and evidence for reconstructing the history of Ancient India.
- Discuss the main features of Harappan and Saraswati Civilization.
- Analysis the way of earlier historians interpreted the history of India and while doingso they can write the alternative ways of looking at the past.
- Analysis Vedic polity and state, rise of Magdha Empire.
- Examine the Mauryan polity under Chandra Gupta Maurya and Ashoka.
- Discuss the Achievements of Kushanas and Satvahanas.
- Examine the expansion of Gupta Empire under Samudragupta and Chandragupta- II.
- Describe the achievements of Harshvardhana, Chalukaya and Kushana.
- Examine the formation and downfall of Delhi Sultnat. Political Development in South India.
- Analyze the Bhakti Movement in South and North India.

Option-ii History of Haryana (From Harappan Age to 1526 A.D.)

Programme Specific Outcomes:

To introduce the students to the major element of political History of Haryana from Harappan Age to 1526. It intends to present and overview of changes in historical context. To introduce the students to the regional history it intends to present and overview of changes in historical context on regional basis. A few introductory lectures on Regional History: Meaning and Scope Sources of History of Haryana Extent of Harappan Civilization in Haryana Expansion of Vedic Culture in Haryana, Haryana between 300 B.C. to 200 A.D.: Polity, Society and Economy Rise of Republies: Yaudheyas, Kunindas and Pushyabhutis Rise of Pratiharas, Tomars and Chauhans, Invasions of Ghaznavi and Ghori: Effects on Haryana

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Establishment of the Turkish Rule: Resistance and Reconciliation Impact of Islam: Socio -Cultural Transition: Economic Conditions up to 1526. Mughal Rule in Haryana: Establishment, Administration and Decline Emergence of the Composite Culture Society, Economy, Art and Architecture in Haryana under the Mughals Struggle for Supremacy during the 18th Century: Marathas, Jats and George Thomas, The British Rule: Establishment and Administration Uprising of 1857: Nature and Effects Gandhian Movements and Freedom Struggle during 1919-1947 Parjamandal Movement in the Princely States, Growth of Modern Education Economic Effects of the Colonial Rule Social Transition and Reform Movements: Arya Samaj and Sanatan Dharam Sabha Formation of Haryana State. With this students introduced to Important Excavated and Explored Sites of Harappan Civilization in Haryana Extent of Harsha's Empire Towns in Haryana (300 B. C. to 1000 A.D.) Invasions of Ghaznavi and Ghori in Haryana Towns in Haryana (1000 A.D. to 1526 A.D.) Important Urban Centers during the Mughal Period Major Centers of Uprising of 1857 Important Places Connected with the Freedom Struggle Princely States Connected with the Prajamandal Movement Formation of Haryana State: Districts and Important Cities

Course Outcomes: After completing the course the students will be able to:

- List the sources and evidence for reconstructing the history of Haryana.
- Discuss the main features of Harappan and Saraswati Civilization in Haryana.
- Analysis Vedic polity, state and battle of Mahabharata.
- Examine the rise of Tomars, Chauhans and Battle of Tarain.
- Describes of the main Invasions of Mahmood Ghaznavi and Muhammad Ghori and its impacts on Haryana.
- Critically examine the expansion and administration of the Sultans of Delhi andMughals in Haryana.
- Describe the expansion and administration of East India Company in Haryana.
- Describe the expansion of uprising of 1857 in Haryana and its impacts.
- : Explain the Gandhian movements in Haryana.
- Discuss the formation of Haryana state.
- Discuss the main features of the society and economy of Harappan and SaraswatiCivilization in Haryana.
- Analysis Vedic Society, Economy and the composition of Vedic literature andGita.
- Examine the social and economic trends under Feudalism in Haryana.
- Describes the social and economic impacts of Islamic invasions on Haryana.
- Critically examine the Social and economic transformation under Delhi Sultanate
- Describe the main features of Society, economy and architecture under theMughals in Haryana.
- Throw light on the social and economic impacts of East India Company onHaryana.
- Write an essay on the development of Modern Education in Haryana.
- . Explain socio-cultural movements in Haryana.
- Discuss the socio-cultural trends of Gandhian Movements in Haryana.

B.A. (GENERAL) HISTORY (SEMESTER SYSTEM) B.A. (General) History – Part – II, Semester – III.

Nomenclature of Paper (Option-i) Political History of India (1526-1857 A.D.)

(Option-ii) Socio-Economic History of India (1526-1857 A.D.)

B. A. (General) History Servet S. P. M. Economic IV

B. A. (General) History Semester System Part - II, Semester - IV

Option-i Modern India (1858-1947 A.D.) Option-ii Indian National Movement

B A II Sem III (Option-i) Political History of India (1526-1857 A.D.) Option-i Modern India (1858-1947 A.D.)

To introduce the students to the major elements of political history of India from 1526 to 1947. It intends to present and overview of political changes in historical context. A few introductory lectures on the Establishment of the Mughal Empire (Babur and Humayun) and Sher Shah Suri with His Administration. Expansion of Mughal Empire under Akbar and Aurangzeb with their Religious Policies. In political History Relations of Mughals with the Rajputs, their Deccan Policy and Central and Provincial Administration with Revenue System Institutions: Mansabdari and Jagirdari. Decline of the Mughal Empire and Rivalry between the French and the British in India (Battles of Karnataka) and Founding of the British Empire with Battles of Plessey, Buxer and Mysore will be the part of political change. Lectures will be on the Consolidation of the British Empire (Subsidiary Alliance System and Doctrine of Lapse and Annexation of Punjab and Awadh) with the Uprising of 1857 and its Causes and Consequences. After the colonial rule students will be introduced to Drain of Wealth under the Colonial Rule, Social Reform Movements (Brahmo Samaj; Arya Samaj; Satyashodhak Samaj; Ramkrishan Mission and Aligarh Movement), Expansion of Railways and its Impact Rise of Modern Industries, Press and Literature: Its Role in Indian Renaissance, Rise of Middle Classes, Peasant Movements- Labour Movements, Depressed Class Movement and Changing Position of Women and Process of Modernization. Student introduced to the Political Conditions of India in 1526, Mughal Empire at the Death of Akbar (1605), Mughal Empire at the Death of Aurangzeb (1707), Expansion of British Empire upto 1856, Major Centres of the Uprising of 1857, Major Centers of Sufi Silsilahs and Bhakti Movement, Major Urban Centers during the Mughal Period Major Internal Trade Routes under the Mughals, Centers of Major Mughal Monuments, Jurisdiction of Major Land Revenue Settlements under the British.

(Option-ii) Socio-Economic History of India (1526-1857 A.D.) Option-ii Indian National Movement

To introduce the students to the major elements of political history of India from 1526 to 1947 in different perspective as per the syllabus. It intends to present and overview of political and other changes in historical context. A few introductory lectures on the Medieval Indian Society: Classes - Ruling Class, Religious Class, Peasants and Artisans; Conditions of the Depressed Classes and Women Bhakti and Sufi Movements; Leading Panths and Silsilahs, Medieval Economy: Agrarian, Land Revenue and Currency Systems under the Mughals Education and Literature; Art and Architecture Pre-British Economy: Handicraft Industry; Trade and Commerce; Village Community with special reference to Jajmani System, The British India: Land Revenue Systems - Permanent Settlement, Ryotwari Settlement and Mahalwari Settlement Decline of Handicraft Industries Introduction of Modern Education and its Impact Development of Railways and its Impact, Origins of the National Consciousness.

Founding of Indian National Congress (Moderates and Extremists: Ideology, Programmes and Politics), Home Rule Movement and Role of Mahatma Gandhi in Freedom Movement (Non-Cooperation Movement, Civil Disobedience Movement and Quit India Movement), Ideology and Contribution of Revolutionaries with special reference to Bhagat Singh and Political Reforms Acts of 1909 and 1919, Rise of Communal Politics (Muslim League – Ideology and Politics, Conclusion of Poona Pact and the Act of 1935), Subhash Chandra Bose and Indian National Army with Partition and Independence of India. With this Major Centers of Sufi Silsilahs and Bhakti Movement, Major Urban Centers during the Mughal Period, Major Internal Trade Routes under the Mughals Centers of Major Mughal Monuments, Jurisdiction of Major Land Revenue Settlements under the British, Places of Important Sessions of Indian National Congress, Areas and Centers of Home Rule Movement, Areas and Centers of Civil Disobedience Movement, Important Centers of Revolutionary Movement and Areas and Centers of Quit India Movement will be underlined in political maps of India.

Course Outcomes: After completing the course the students will be able to acknowledge and understand:

- Describes the establishment of Mughal Empire under Babur and Humayun.
- Describe the administrative reforms of Shershah Suri.
- Describe the relation of Mughals with Rajputs.
- Throw light on the Deccan Policy of Aurangzeb, Administration of Mughals withspecial reference to Land Revenue System.
- Write an essay on the Mansabdari and Jagirdari systems.
- Describe the emergence of regional powers in Maharashtra, Bengal and Punjab.
- Discuss the circumstances of the battles of Carnatika and establishment of BritishRule in Bengal.
- Describe the main teachings of Bhakti Movement and Sufi Movement.
- Describe the emergence of Ruling Class, Religious Class and condition of Peasantsand Artisans under the Mughals.
- Throw light on the economy of the Mughals.
- Throw light on the Sufi Silsilas.
- Write an essay on the growth of education, literature and a rehitecture under theMughals.
- Write an essay on the economy in the first-half of the 18ⁿ century.
- Discuss the position of peasantry under regional powers.
- Discuss the emergence and growth of national consciousness among the Indians.
- Analysis the circumstances of the formation of Indian National Congress.
- Throw light on the Ideology, Programmes of Moderates and Extremists.
- Describes the circumstances of the partition of Bengal and emergence of Swadeshiand Boycott Movement.
- Throw light on the Home Rule Movement.
- Describe growth of Revolutionary Movement during 1905 1919.
- Describe the circumstances of the formation of Muslim League and its role incommunal politics during 1906 – 1919.
- Write an essay on Rowlett Satyagrah and Jallianwala massacre.
- Describe the main features of the Government of India Act of 1919.
- Discuss the emergence of Mahatma Gandhi in Indian politics.
- Analysis the circumstances and expansion of Non-Cooperation Movement.
- Throw light on the ideology, programmes of Moderates and Extremists.
- Describe the role of Bhagat Singh and HSRA in national movement.
- Throw light on Round Table Conferences and Poona Pact.

- Describe the causes and growth of Civil Disobedience Movement.
- Describe the circumstances and expansion of Government of India Act of 1935
- Write an essay on Subhash Chandra Bose and INA in National Movement.
- Critically examine the growth of communal politics and role of Muslim League inthe Partition of India.

B.A. (General) History - Part - III, Semester - V

Option-i Ancient and Medieval World Option-ii Rise of Modern World Option-iii East Asia in Modern Times

Option- I Ancient and Medieval World

To introduce the students to the major elements of the Ancient and Medieval World in different perspective as per the syllabus. It intends to present and overview of political and other changes in historical context. A few introductory lectures on Evolution of the Humankind (Paleolithic, Mesolithic and Neolithic Cultures Civilizations of Mesopotamia and Egypt) Polity, Economy, Society, Religion, Arts, Science and Technology, Ancient Greece and Rome (Athenian Democracy, Roman Republic, Society, Economy; Fall of the Roman Empire); Feudal Europe (Manorial System, Organization of Production, Position of Peasants and Artisans Medieval Church and State), Trade and Commerce and Growth of Port Cities and Towns, Decline of Feudalism, Hazrat Muhammad and four Pious Caliphs, Evolution of Islamic State under Umayyads and Abbasids, Islamic World (Society, Economy, Literature, Art and Architecture) and Religious Developments (Origins of Sufism). Students were introduced with Extent and Important Places of the Civilization of Mesopotamia Extent and Important Places of the Civilization of Egypt Extent and Important Centers of Roman Civilization Major Ports and Urban Centers in Medieval World Extent and Important Places of Arab Empire up to 1258 A.D

Programme Specific Outcomes: To introduce the students to the major elements of World History (From Ancient to Medieval World). It intends to present and overview of political, Social and Economic changes in historical context. A few introductory lectures on Ancient Civilizations Mesopotamia, Egypt, Greek and Rome, Feudalism in Europe, Medieval State and Church, Hazrat Mohammad and Politics of Islam, Islamic State, Ottoman Empire, Early Colonial Activities, Glorious Revolution etc. would be required to commence the paper.

Course Outcomes: After completing the course the students will be able to:

- Discuss the main features of Mesopotamia Civilization.
- Describe social, economic and cultural life of the people of Egypt Civilization.
- Explain the main features of Greek Civilization.
- Describe the political, social, economic and religious life of the people of RomanCivilization.
- Throw light on Feudalism in Europe.
- Critically examine the relation between State and Church.
- Describe early life and teachings of Hazrat Mohammad.
- Describe the evolution of Islam under Umayyads and Abbasids.
- Discuss the origin and expansion of Ottoman Empire.
- Describe the early colonial activities of Spain, Portugal and French.
- Write an essay on the main causes and results of Glorious Revolution.

Option-ii Rise of Modern World

Students introduced to Transition from Feudalism to Capitalism in Europe Renaissance: Origins, Emergence and Results Reformation: Origins, Emergence and Results, Shift of Economic Balance from the Mediterranean to Atlantic Region Early Colonial System: Motives, Process and Consequences of Colonization of Americas Mercantile Revolution: Origins and Results. Scientific Revolution: Origins and Impact, Glorious Revolution: Origins and Results Industrial Revolution: Origins, Progress and Impact, Students were made familiar with Important Centers of Renaissance Important Centers of Reformation Important Mercantile Centers Major Places Connected with Industrial Revolution Capitalist Powers of Europe.

Programme Specific Outcomes: To introduce the students to the major elements of Modern World. It intends to present and overview of Political change in historical context. A few introductory lectures on Scientific Revolution, Agrarian Revolution, American Revolution, Industrial Revolution, French Revolution, Parliamentary Reforms, Imperialism, Formation of Triple alliance and Triple Entente, First World War, Bolshevik Revolution Nazism and Fascism, Second World War etc. would be required to commence the paper.

Course Outcomes: After completing the course the students will be able to:

- Throw light on Scientific Revolution.
- Describe the eauses, development and impacts of Agrarian Revolution.
- Explain the main causes and development of American war of independence.
- Describe the main causes, development and impacts of Industrial Revolution.
- Throw light on causes and consequences of French Revolution.
- Write an essay on Parliamentary Reforms in England.
- Critically examine imperialism in Africa.
- Throw light on the formation of Triple Alliance and Triple Entente.
- Describe the main causes and consequences of World War-I.
- Describe the main causes and consequences of Bolshevik Revolution in Russia.
- Write an essay on Nazism and Fascism.
- Describe the main causes and consequences of World War-II.

Option- iii East Asia in Modern Times

In the changing world students get acquainted with The Canton System in China and Opium Wars, The Boxer Uprising Revolution of 1911 (Causes and Significance), Communist Revolution of 1949 (Causes and Consequences), The Meiji Restoration in Japan (Causes and Significance), Foreign Policy of Japan 1900-1919, Militarism in Japan and Japan in World War II. Industrial and Agricultural Transformation in Japan after Meiji Restoration and Social Change in Japan after Meiji Restoration. The Land Collectivization and Economic Change in China after 1949 and Cultural Revolution in China. Students were made familiar with European Colonial Expansion in China, Important Ports Opened for Western Powers in Japan, Route of Long March in China, Important Industrial Centers of Japan Important Towns and Ports of Japan Affected during World War- II

Course Description: The objective of the paper is to acquaint the students with the major events, dynasties and historical phenomena in the course of the evolution and shaping of the

civilization in the East Asian region in general and the two regions namely China and Japan in particular, in a chronological order, in order to serve as a backdrop for the study of issues of social, political and economic changes in other compulsory and optional papers.

Course Objective: The objective of this course is to present an overview of the major trends of historical changes that took place in three countries of East Asia: China and Japan. This course is designed to serve as background knowledge for students to acquaint themselves about the civilization of East Asia.

Course Outcome: This course would create a foundation for the students of East Asian students to pursue further the various aspects of East Asia, such as economy, politics, culture, society, foreign relations, philosophy, art, literature, etc. in due course of time.

History of China

- 1. Major patterns, trends and characteristics of Chinese History
- 2. Ideology and the Chinese state -from Pre-Qin (pre-221 BCE) to the Qing (1644-1911)
- 3. Sovereignty and state legitimation- from Pre-Qin to the Qing era
- 4. From aristocracy to bureaucracy- from pre-Qin to the Qing
- 5. Sino-barbarian relations- from pre-Qin to the Qing
- 6. The patterns of Chinese economy- from pre-Qin to the Qing
- 7. Military transformation and development- from pre-Qin to the Qing
- 8. Chinese Maritime Past- from pre-Qing to the Qing
- 9. China and the Outer World- from pre-Qin to the pre-modern era
- 10. Coming of the West and Chinese Nationalism- mid-19th to mid-20th century

History of Japan

- Archaeological evidence and the beginnings of Japanese civilization; From Paleolithic Age and Neolithic Age to Jömon period and the Settled Agricultural community of Yayoi period.
- Emergence of social stratification and the State: The Tomb culture and the nature of clan politics of the Yamato State
- Sinification of the Yamato state and society: Buddhism and its impact on society, culture, administrative reorganization, art, architecture, literature and philosophy
- Economic Crisis and the Decline and disintegration of the centralized Japanese empire: Shoen system (Land grants) and the emergence of regional lords
- Aristocracy in Japanese society and politics: Fujiwara hegemony and the emergence of a culture of landed elites in Japanese society and politics
- Military in Politics: Evolution and rise of the Samurai class in Japanese society and politics and its impact on the social, economic and political reorganization
- 7. Military Aristocracy and the Era of Warring States: Decentralized feudalism and evolution of region-specific patterns of culture, art, architecture
- Reunification of Japan and emergence of a centralized feudal set-up under the Tokugawa Shogunate
- 9. Characteristic features of Tokugawa polity, society, culture and economy
- 10. Decline of Tokugawa feudalism and transition to Japanese capitalism: Meiji period reforms and its impact on Japanese society, culture and economy

B.A. (General) History – Part – III, Semester – VI

Option-i Modern World

Option-ii Modern Europe (1789-1945 A.D.)

Option-iii Rise of Indian Republic (1947-1964)

Option-i Modern World

After the 16" century students go through the Renaissance and Reformation, Rise of Capitalism, Early Stages - Mercantile Capital and Free Trade Capital, Agricultural Revolution and Industrial Revolution, Growth of Liberalism in England and Development of Parliamentary Form of Government, American and French Revolution with its Nature and Impact, Rise of Imperialism and World War - 1, Paris Peace Settlement and its Consequences, Rise of Socialism and Bolshevik Revolution in Russia, Rise of Dictatorship means Nazism and Fascism which results in World War - II. Moreover the students were introduced and made aware with the geographical expansion on maps of European Countries having been witnessed Industrial Revolution Europe on the Eve of French Revolution, Polarization of Countries before World War-I, Europe after Paris Peace Settlement and Polarization of Countries before World War-II.

Programme Specific Outcomes: To introduce the students to the major elements of Modern World. It intends to present and overview of Political change in historical context. A few introductory lectures on Scientific Revolution, Agrarian Revolution, American Revolution, Industrial Revolution, French Revolution, Parliamentary Reforms, Imperialism, Formation of Triple alliance and Triple Entente, First World War, Bolshevik Revolution Nazism and Fascism, Second World War etc. would be required to commence the paper.

Course Outcomes: After completing the course the students will be able to:

- Throw light on Scientific Revolution.
- Describe the causes, development and impacts of Agrarian Revolution.
- Explain the main causes and development of American war of independence.
- Describe the main causes, development and impacts of Industrial Revolution. Throw light on causes and consequences of French Revolution.
- Write an essay on Parliamentary Reforms in England.
- Critically examine imperialism in Africa.
- Throw light on the formation of Triple Alliance and Triple Entente.
- Describe the main causes and consequences of World War-1,
- Describe the main causes and consequences of Bolshevik Revolution in Russia.
- Write an essay on Nazism and Fascism.
- Describe the main causes and consequences of World War-II.

Option- (ii): Modern Europe (1789-1945 A. D)

18* century was the period of revolution and political change in Europe. Here students were introduced and made aware with the revolutions like French Revolution and Napoleon Bonaparte with Rise to Power and Continental System Congress of Vienna, Concert of Europe and the Metternich System, Nationalism in Europe with Unification of Italy and Germany and Formation of Triple Alliance and Triple Entente. World War I, Bolshevik Revolution in Russia, Paris Peace Settlement and Treaty of Versailles, League of Nations, Rise of Nazism and Fascism and World War II. Moreover the students were introduced and made aware with

the geographical expansion on maps of European Countries having been witnessed Europe on the Eve of French Revolution Reconstruction of Europe by the Vienna Congress Europe on the Eve of World War – I Europe after Paris Peace Settlement Europe on the Eve of World War – II

Programme Specific Outcomes: To introduce the students to the major elements of Modern Europe. It intends to present and overview of Political change in historical context. A few introductory lectures on French Revolution, Napoleon Bonaparte, Congress of Vienna, Concert of Europe Metternich System, Unification of Italy and Germany, Foreign policy of Bismarck, Formation of Triple Entente, Partition of Africa, First World War, Bolshevik Revolution, Treaty of Versailles would be required to commence the paper. It introduces the prominent causes of Failure of Nazism and Fascism in Germany and Italy, also gave wide perspective of Nature and Consequences of World War II.

Course Outcomes: After completing the course the students will be able to:

- Throw light on causes and consequences of French Revolution.
- Describe the emergence and decline of Napoleon Bonaparte.
- Explain the main conditions and significance of Congress of Vienna.
- Describe the nature and impacts of the concert of Europe.
- Discuss the nature and growth of Metternich system
- Write an essay on unification of Italy and Germany.
- Critically examine foreign policy of Bismarck.
- Throw light on the formation of Triple Entente.
- Describe the circumstances of partition of Africa.
- Describe the main causes and consequences of World War-I.
- Describe the main causes and consequences of Bolshevik Revolution in Russia,
- Write an essay on the treaty of Versailles and its consequences.

Option-iii Rise of Indian Republic (1947-1964)

20s century was the time of extreme nationalism in India. After 1947 India was partitioned and students learn Partition and Independence of India, Rehabilitation of Displaced People, Integration of Princely States, Making of Indian Constitution and the Role of Dr. B.R.Ambedkar, Problem of Kashmir, Economic Planning and Social Justice, Non-Aligned Movement and Relations with Neighbourers: Pakistan and China, Linguistic Reorganization of States Growth of Democracy, Political Parties at National Level, Development of Science, Technology and Modern Education with Social Change. Moreover the students were introduced and made aware with the geographical expansion on maps of India and its States after Independence, Major Princely States Integrated in India, Major Industrial Centers of India, Major Scientific Technological and Educational Centers and India and its States in 1956.

Programme Specific Outcomes: To introduce the students to the major elements of Contemporary India: State and Politics. It intends to present and overview of State and Politics in historical context. A few introductory lectures on Partition of India and rehabilitation, Making of Indian Constitution, problem of Kashmir, Foreign Policy, Indo-Pak relation, India's relation with USA and USSR, reorganization of states, nature of political parties, electoral politics etc. would be required to commence the paper.

Course Outcomes: After completing the course the students will be able to:

- Discuss the circumstances of Partition and Rehabilitation.
- Describe main features of Indian Constitution.
- Explain problem of Kashmir.
- Describe the integration of princely states.
- Throw light on foreign policy of India up to 1966.
- Describe the role of India in Non-Alignment Movement.
- Critically examine Indo-Pak Relations.
- Discuss Sino-India Relation.
- Describe foreign policy of India with special reference to India's relation with USAand USSR.
- Throw light on reorganization of States since 1950.
- Describe the nature of Centre-State relations.
- Write an essay on nature of political parties and electoral politics.

बी. ए. संस्कृत

कार्यप्रणाली परिणाम

(Course Outcome)

बी, ए, प्रथम सत्र ES21 संस्कृत ऐच्छिक

co: पशु- पिक्षयों की कहानियों के माध्यम से नीतियों, धार्मिक स्कितयों व जीवनोपयोगी तथ्यों का जान कराना

co: सरल और सरस भाषा शैली के माध्यम से सामाजिक व राजनीतिक ज्ञान प्रदान कराना

co: सरल व छोटे वाक्यों के प्रयोग के द्वारा संस्कृत वाग्व्यवहार कराना

co: विद्या के महत्व का प्रदर्शन करके नीति व धर्म के मार्ग का ज्ञान कराना।

co: लोक विहार व जीवन के सत्य का मार्ग उद्घाटित कराना

co: शब्द रूप धातु रूप द्वारा बौद्धिक क्षमता को विकसित कराना

co: संधि के द्वारा वर्णों के परस्पर मेल का ज्ञान कराना

2. बी. ए. द्वितीय सत्र ES22 संस्कृत ऐच्छिक

co: श्रीमद्भगवद्गीता द्वितीय अध्याय के माध्यम से श्रीकृष्ण द्वारा दिए गए क्षत्रिय धर्म, आत्मा की अमरता, निष्काम कर्मयोग तथा स्थितप्रज्ञ (बुद्धि की स्थिरता) आदि विषयों से विद्यार्थियों को परिचित कराना CO:श्रीमद्भगवद्गीता के माध्यम से कर्म व उन्नित के लिए प्रेरित कराना।
CO:नीतिशतक के माध्यम से न्यायपूर्ण कथनों के द्वारा विद्या का
महत्त्व,सज्जनता,उदारता, स्वाभिमान, सहनशीलता, सत्य आदि गुणों से

co : व्याकरण के माध्यम से भाषा का ज्ञान कराना

co: सार्थक शब्दों का ज्ञान कराना

विद्यार्थियों का परिचय कराना

w.

co: अनुवाद द्वारा बौद्धिक क्षमता को विकसित करना

co : छंदों के माध्यम से मात्राओं के गानों का ज्ञान कराना

co: संस्कृत एक योगातमक भाषा है, विभक्ति व धातुरूपों के द्वारा वाक्य निर्माण प्रक्रिया से परिचित कराना

3.. बी. ए. तृतीय सत्र ES23 संस्कृत ऐच्छिक

co: भासकृत पंचरात्रम्' नाटक के माध्यम से भारतीय पुरातन संस्कृति व ऐतिहासिक ज्ञान से परिचित कराना

co: पंचरात्रम् का कथानक 'महाभारत' के 'विराट् पर्व' से संबंध रखता है नाटककार ने ऐतिहासिकता को लेकर कल्पना के सिम्मिश्रण से नाटक को रोचक बनाया नाटककार भास की नाट्य कला के द्वारा विद्यार्थियों का बौदिधिक विकास कराना

co: नाटकों में प्रयुक्त पारिभाषिक शब्दावली के माध्यम से नाटकों के विशिष्ट शब्दों से परिचित कराना

co: संस्कृत गद्य साहित्य के इतिहास के माध्यम से भाषा सींदर्य, वर्णन चातुर्य, कल्पना का वैचित्र्य, पद लालित्य द्वारा ज्ञान प्रदान कराना। co : संस्कृत व्याकरण में प्रत्यय के द्वारा भाषा की शुद्धता का ज्ञान कराना

co : व्याकरण में समास के द्वारा संक्षिप्तीकरण का ज्ञान कराना

co : पत्र लेखन द्वारा लेखन क्षमता विकसित कराना।

4.. बी. ए. चतुर्थ सत्र ES24 संस्कृत ऐच्छिक

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co : महाकाव्य रघुवंश की कथा के अनुसार राजा दिलीप के आदर्श धर्म परायणता कर्तव्य निष्ठा ईमानदारी से परिचित कराना

co: ऐतिहासिक उपन्यास के द्वारा सामाजिक, राजनीतिक और व्यवहारिक ज्ञान प्रदान कराना।

co: व्याकरण में प्रत्यय के द्वारा भाषा की शुद्धता व सार्थक शब्दों का जान कराना।

co: भाषा के ज्ञान के लिए अनुवाद द्वारा बौद्धिक क्षमता बढ़ाना।

co: सरल वाक्यों के माध्यम से संस्कृत वाग्व्यवहार कराना।

5.. वी. ए. पंचम सत्र ES25 संस्कृत ऐच्छिक

co : संस्कृत नाटक के माध्यम से नाट्यकला से परिचित कराना।

co: संस्कृत साहित्य के सुप्रसिद्ध कवि कालिदास का नाटककार, गीतिकार, महाकाव्यकार के रूप में परिचय कराना।

co:वैदिक साहित्य द्वारा भारतीय संस्कृति और पुरातन ज्ञान से परिचित कराना। co: संस्कृत व्याकरण में कारकों के माध्यम से वाक्य रचना व संस्कृत संभाषण का जान कराना।

co : व्याकरण में अलंकार के द्वारा काव्य सौंदर्य से परिचित कराना।

6.. बी. ए. षष्ठ सत्र _{ES26} संस्कृत ऐच्छिक

co: संस्कृत नाटक के माध्यम से लेखन कौशल व पठन कौशल को विकसित करना

co: संस्कृत के महान कवि कालिदास की कृतियों में जीवन दृष्टि, राष्ट्रीय भावना, प्रकृति चित्रण से परिचित कराना

co: संस्कृत साहित्य के इतिहास में सुप्रसिद्ध कवियों का परिचय कराना

co: निबंध लेखन द्वारा लेखन कला को विकसित कराना।

co: व्याकरण में प्रत्यय के ज्ञान द्वारा सार्थक शब्दों के ज्ञान से भाषा शुद्धता का ज्ञान कराना P. O. of B.Sc. medical + C.O of Botany

B.Sc. MEDICAL

PROGRAMME OUTCOME

Bachelor of Science (B.Sc.) in Medical is a three years undergraduate programme with Science subjects i.e., Botany, Zoology and Chemistry. Students seeking admission in this programme must have Physics, Chemistry and Biology subject in their Senior Secondary School are eligible to opt for this programme. This programme is beneficial for students having interest in Biological Sciences i.e., Plant Science and Animal Sciences. The programme structure is designed by skilled and efficient subject experts keeping in view the carrier prospects of students. A students acquiring B.Sc. (Medical) degree will be skilled in the following fields:

- Plant Taxonomy and Identification: Student will be able to identify and classify major group of
 plants with their characteristic features.
- Practical Implementation and Theoretical Knowledge: Student will learn to carry out practicals
 in the field and Laboratory with minimal risk.
- Communication Skills: Students are given exposures through various events organized by Botany department to enhance their communication skills like Seminars, Power point presentations, Project Reports and Viva-voce.
- Conservation of Botanical Gardens: Through field work in the Botanical Gardens, students are able to learn Integrated Conservation Approaches for plants. Students will also be able to learn Plant Propagation Techniques.
- Environment Sustainability: Students shall be able understand the impact of plants in Societal
 and Environmental contexts and demonstrate the knowledge of and need for sustainable
 development.
- Scientific Ethics: Students will be able to understand and commit to scientific and environmental
 ethics like honesty in reporting and analysis of results, responsibilities and norms of the
 biodiversity conservation, proper crediting of sources of information, data and ideas.
- Modern Tool Usage: Apply appropriate techniques, resources and modern instructions and equipments for Biochemical, Physiological, Molecular, Plant Tissue Culture of Plants.
- Ethno botany: Able to understand and learn Importance and Utilization of Economically Important Plant

Having B.Sc Medical degree opens doors to Science as a Profession like

- Pharmaceutical, Horticulture, Floriculture, Vermiculture, Pisciculture, Sericulture, Silviculture, Medical Hospitals, Veterinary, Aquaculture, Biotechnology, Microbiology, Beverage Industries, Sugar Mill, Pathological Laboratory
- Student can work in Government sectors related to Agriculture department, Forest department, Food and Beverage Industries
- Student can choose teaching like Educational Institutes like Schools and Colleges or can be a Scientist.
- Further studies like M.Sc. Botany, Zoology, Microbiology, Biotechnology, Biochemistry, Genetics and Chemistry, B.Ed., Diploma in Lab technician
- Microbusiness like Nurseyman, Vermiculture, Organic farming, Coaching Institutes
- > Student can further prepare for competitive exams like IFS, UPSC, SSC, CGL

PROGRAMME SPECIFIC OUTCOME

Botany is abroad discipline having various branches involved with the study of plants and deals with phylogenetic systematic of plants covering higher plants, lower plants, aquatic plants, nature/field study, functional aspects of various cellular processer of plants, molecular genetics and modern tools i.e. tissue culture, genetic engineering and computational studies.

- Department of Botany always tried to create environment awareness along its students.
- tudying Botany in B.Sc. Medical involves broad range of Scientific disciplines concerned with the study of Microbes (Bacteria, Fungi, Algae), and Plants (Bryophytes, Pteridophytes, Gymnosperms and Angiosperms)
- Students will learn Morphology, Anatomy, Development, Reproduction, Metabolism, Physiology of various Plants.
- They will be able to explain various plant process, metabolism, concepts of gene, genome, experimental teachings and methods of their area of specialization in botany.
- Perform Laboratory experiments related to Cell Biology, Genetics, Plant Physiology, Anatomy,
 Embryology, Taxonomy, Biochemistry and Biotechnology.

- They gain introductory experience in applying each of the following skills and gain greater proficiency in selection of them.
 - Interpreting plant morphology and anatomy
 - Plant identification
 - Vegetative analyses skills
 - Plant pathology to be added for sharing of field and lab data obtained
- We organizes various excursion and field visits at natural habitat as per the curriculum so that students can have closer look to their Environment.
- Students visit Industries and prepare report on Sources, types and control of air and water pollution as a part of their curriculum requirement. Field exposures are given for better understanding of plant distribution and collection
- Field reports are maintained for Algae, Fungi, Bacteria, Bryophytes, Pteridophytes, Gymnosperms and Angiosperms
- Apply appropriate techniques, resources and modern instruments for practical performance
- Understand the application of Biological Sciences in carrier fileds.
- Understand the relationship among Microbes and Plants.
- Understand the Interactions between Plants, Environment and Human Beings and our role in Environment conservation.
- Various topics related to Global Change like Greenhouse effect and greenhouse gases; impacts
 of global warming; Carbon Trading are also taught as a part of curriculum.
- Different activities to save environment such as celebration of World Environment Day, Ozone
 Day, Earth Day, Van Mahotsav and Wild Life Week in association with Zoology department are
 organized by department.
- Various events like slogan and poster competitions, bouquet formation, invited talks and flower
 exhibition are organized to create awareness about nature, biodiversity, environment and
 sustainability. Such activities enable the students to learn about the ecosystem and other
 environmental factors.
- They also learn measures to protect the environment and are made aware of global warming and other related issues. Drawing posters and essay competitions are held regarding environment issues to cheer up the students.

BSc. Medical student having Botany as a subject is able to acquire knowledge regarding- Diversity of Microbes, Cell Biology, Seed Plants Diversity, Plant Anatomy, Plant embryology, Plant physiology, Plant biotechnology, Biochemistry, Ecology and Economic Botany.

COURSE OUTCOMES OF THE COURSE ! BOTA NY

Course Outcomes of the course "Diversity of Microbes"

COL

- Student can describe Structure, nutrition, reproduction and economic importance of Bacteria.
 Can briefly explain general account of cyanobacteria (with reference to Nostoc).
- Student can describe general characters, classification (upto classes) and economic importance, important features and life-history of Volvox, Oedogonium, Vaucheria, Ectocarpusand Polysiphonia. and canwrite down the General account of Viruses including structure of TMV and Bacteriophages.
- Students can explain general characters, classification (upto classes) and economic importance; important features and life-history of *Phytophthora* (Mastigomycotina), *Mucor* (Zygomycotina), *Penicillium* (Ascomycotina), *Puccinia*, *Agaricus* (Basidiomycotina), *Colletotrichum* (Deuteromycotina) Write down the general account of Lichens.

Course Outcomes of the course "Cell Biology"

- Students will be able towrite down the structure and functions of Cell Wall and Plasma Membrane.
- They can explain the Ultrastructure and function of nucleus, Golgi Apparatus, Endoplasmic Reticulum, Chloroplast, Mitochondria, Lysosomes, Peroxisomes and Vacuoles.
- Students can explain Mitosis and Meiosis. Describe Morphology, organization, ultrastructure of Centromere and Telomere. They can explain Chromosomal alterations- deletions, duplications, translocations, inversions.
- Students can describe variations in chromosome number- aneuploidy, polyploidy, sex chromosomes and sex determination

Course Outcomes of the course "Diversity OF Archegoniates "

CO3

- Students can giveGeneral characters, classification (upto classes), alternation of generations, structure and reproduction(excluding development) of Marchantia (Hepaticopsida), Anthoceros(Anthocerotopsida), Funaria (Bryopsida)
- They can explaingeneral characters, classification (upto classes), alternation of generations, structure and reproduction (excluding development) of Rhynia (Psilopsida), Selaginella(Lycopsida), Equisetum (Sphenopsida) and Pteris (Pteropsida)

Course Outcomes of the course "Genetics"

- Students can give an account on DNA the genetic material, DNA structure and replication, DNA-Protein interaction, the Nucleosome Model, Genetic Code, Satellite and Repetitive DNA. Students canbriefly explainLaws of segregation and Independent Assortment; Linkage Analysis; Allelic and non-allelic interactions.
- They can describemutations- spontaneous and induced; transposable genetic elements; DNA damage and repair
- Students can explain the modern concept of gene; RNA; Ribosomes; transfer of genetic
 information- transcription and translation (Protein Synthesis); regulation of gene expression in
 prokaryotes and eukaryotes; 1-D, 2-D and 3-D structure of Proteins.
- They can describeExtra Nuclear Inheritance: Presence and function of Mitochondrial and Plastid DNA; Plasmids

Course Outcomes of the course "Biology and Diversity of Seed Plants-I"

CO05

- Students canexplain General characters and diversity of Gymnosperms (seed plants without fruits)The can classify Pilger and Melchior's (1954) system of classification Students candescribe Geological Time Table and Evolution of Seed Habit.
- They candescribe Fossils and and the process of Fossilization, types of Fossils and Importance of
 Fossils. They will be able to understand the reconstruction of the following fossil plants
 Lyginopteris, Williamsonia, Cycadeoidea (= Bennettites)
- Students canbriefly explain morphology and anatomy of root, stem, leaf/leaflet and reproductive
 parts including mode of reproduction, life-cycle and economic importance of: Cycas, Pinus,
 Ephedra. They can write down the general characters of Angiosperms including primitive
 angiosperms (Amentiferae, Ranales, Magnoliales).

Course Outcomes of the course "Plant Anatomy"

- Students can give account on diversity in plant forms annuals, biennials and perennials. They
 canbriefly explain tissues- meristematic and permanent (simple and complex). They candescribe
 the Shoot system- shoot apical meristem and its histological organizations (monocot and dicot
 stem). Students canwrite an account on Cambium-structure and functions.
- Students can explain Secondary growth in dicot stem, characteristics of growth rings, sap wood, heart wood and periderm
- 3. Students canexplain anomalous secondary growth in Dracaena, Boerhaavia and AchyranthesStudents cangive an account on types of leaves (simple and compound) and phyllotaxy. They canwrite down on uniseriate and multiscriateEpidermis, epidermal appendages and their morphological types. Students canexplain anatomy of typical Monocot and Dicot leaf and cell inclusions in leaves, leaf abscission, stomatal apparatus and their morphological types.
- Students candescribe the root apical meristem and the histological organization (monocot and dicot root, secondary growth in dicot root.

 Students candescribe structural modifications in roots-storage (Beta), Respiratory (Rhizophora), Epihytic (Vanda)

Course Outcomes of the course "Biology and Diversity of Seed Plants-II"

CO 7

- 2. Students canbriefly explainTaxonomy and Systematics, fundamental components of taxonomy (identification, classification, description, nomenclature and phylogeny). What is the role of chemotaxonomy, cytotaxonomy and taximetrics in relation to taxonomy?
- They can explain botanical Nomenclature, principle of priority, principles and rules. They can
 explain type concept and taxonomic ranks keys to identification of plants
- Students will be able to describe flower and types of Inflorescence. They can explain salient features of the systems of classification of angiosperms proposed by Bentham & Hooker and Engler & Plant.
- They will be able to explain the diagnostic features and economic importance of the following families: Ranunculaceae, Brassicaceae, Malvaceae, Euphorbiaceae, Rutaceae, Leguminosae, Apiaceae, Asclepiadaceae, Lamiaceae, Solanaceae, Asteraceae, Liliaceae and Poaceae

Course Outcomes of the course "Plant Embryology"

- Students can explain flower as a modified shoot, functions of various floral parts microsporangium, its wall and explain the mechanism of dehiscence. They can describe microsporogenesis, pollen grains and its structure (pollen wall), pollen-pistil interaction and self incompatibility.
- Students can describe pollination, its types and agencies, pollen germination (microgametogenesis), development of male gametophyte.
- A learner cangive an account on thestructure of megasporangium (ovule), its curvatures, megasporogenesis and megagametogenesis, structure offemale gametophyte (mono-bi and terasporic)

 Students can describedouble fertilization, endosperm, its types and its biological importance, embryogenesis in dicot and monocot, polyembryony. They can explain structure of dicot and monocot seedfruit types and dispersal mechanisms in fruits and seeds

Course Outcomes of the course "Plant Physiology"

CO9

- Students cangive an account on importance of water to plant life, its physical properties candefineImbibition, Diffusion, Osmosis and Plasmolysis. They can explain absorption and transport of water. They can describetranspiration and its types the physiology of stomata, factors affecting transpiration and importance of transpiration.
- They will be able to explain essential macro and micro elements and their role,can.explain deficiency symptoms
- Students can describe mineral uptakeThey can explain the mechanism of phloem transport an
 account on source-sink relationship and factors affecting translocation
- They can explain on photosynthetic pigments, action spectra and enhancement effect, concept of two photosystems, Z-scheme and photo-phosphorylationCalvin cycle, C4 pathway, CAM plants and photorespiration., ATP-the biological energy currency.
- 5. Students can explain aerobic and anaerobic respiration, Krebs cycle, electron transport mechanism (chemi-osmotic theory) redox -potential, oxidative phosphorylation, pentose phosphate pathway Students can give an account of seed dormancy, plant movement, photoperiodism and physiology of flowering. They candescribeflorigen concept, physiology of senescence and fruit ripening

Course Outcomes of the course "Ecology"

- Students can explain scope and importance of Ecology, levels of organization. They can explain environmental factors- climatic (water, humidity, wind, light, temperature), edaphic (soil profile, physico-chemical properties), topographic and bioticfactors (species interaction).
- Students will be able to explain adaptations of plants to water stress and salinity (morphological and anatomical features) of hydrophytes, xerophytes and halophytes

- Students will be able to describe population ecology, its characteristics, biotic potential, growth curves, ecotypes and ecads.
- They can explain community ecology, its characteristics (qualitative and quantitative analytical and synthetic), methods of analysis of community ecology, ecological succession
- Students candescribe thestructure (components) and functions of trophic levels, food chains, food webs, ecological pyramids and energy flow
- 6. Students can describe carbon, nitrogen and hydrological (water) cycle.
- 7. They can briefly explain phyto-geographical regions of India, vegetation types of India (forests)
- 8. They candescribe sources, types and control of air and water pollution
- They can write briefly on Greenhouse effect, greenhouse gases, impacts of global warming and carbon trading

Course Outcomes of the course "Biochemistry & Plant Biotechnology"

- Students candescribe discovery, nomenclature and characteristics of enzymes, holoenzyme, apoenzyme, coenzyme and co-factors, regulation of enzyme activity and mechanism of action
- Students can describegrowth and development and its phases, plant hormone, history of discovery and mechanism of action of Auxins, Gibberellins, Cytokinins, Abscissic acid and Ethylene
- They can explaindiscovery, physiological role and mechanism of action of photo morphogenesis and phytochromes.
- Students can explainstructure and functions of lipids, saturated and unsaturated fatty acids, storage and mobilization of fatty acids, fatty acid biosynthesis, α and β-oxidati
- They can describe thebiology of nitrogen fixation, importance of nitrate reductase and its regulation, ammonium assimilation.
- Students can describe tools and techniques of recombinant DNA technology, cloning vectors, genomic and cDNA library, agrobacterium, vectors for gene delivery and marker genes.
- Students can explain transposable elements. Explain the aspects of plant tissue culture, cellular totipotency, differentiation and morphogenesis

Course Outcomes of the course "Economic Botany"

- Students canwrite briefly on origin, distribution, and botanical description, brief idea of cultivation and uses of cereals(Rice, Wheat and Maize)
- Students can explain origin, distribution, botanical description, brief idea of cultivation and uses of the pulses(Gram, Arhar and Pea)
- They can explain origin, distribution, botanical description, cultivation and uses of the vegetables(Potato, Tomato and Onion)
- They can describe the origin, distribution, botanical description, brief idea of cultivation and uses of the fibers (Cotton, Jute and Flax)
- Students can describe origin, distribution, botanical description, cultivation and uses of the Groundnut, Mustard and Coconut
- They will be able to describe the morphology of plant part used, cultivation and uses of the spices (Coriander, Ferula, Ginger, Turmeric and Cloves)
- 7. Students can describe themedicinal plantsCinchona, Rauwolfia, Atropa, Opium, Cannabis, Neem
- 8. They can explain botanical description and processing of Beverages- Tea and Coffee
- Students can write briefly on botanical description and processing of rubber (Hevea) and Sugar(Sugarcane)
- 10. Students can describe the sources of timber; energy plantations and bio-fuels

Department of Political Science Government (PG) College Ambala Cantt Affiliated to Kurukshetra University Kurukshetra

Programme outcomes for BA (Political Science)

- Demonstrate a detailed knowledge and understanding of selected fields of study in core disciplines in the humanities, social sciences and languages;
- Apply critical and analytical skills and methods to the identification and resolution of Problems within complexed changing social contexts.
- Demonstrate a general understanding of the concepts and principles of selected areas of study outside core disciplines of the humanities, social sciences and languages;
- 4: Apply an independent approach to knowledge that uses rigorous methods of inquiry and appropriate theories;
- Articulate the relationship between diverse forms of knowledge and the social, Historical and cultural contexts that produced them;
- 6: Communicate effectively and show ability to read, write, listen to and speak in a Chosen language/s with fluency;
- 7: Act as informed and critically discerning participants within the community of Scholars, as citizens and in the work force;
- 8: Work with independence, self-reflection and creativity to meet goals and challenges in The workplace and personal life.

Indian government and politics opt-I

Objective: The paper aims at introducing the students to major political processes and Institutions those are integral to politics in India.

Course Outcomes:

- 1. Understand the basic features of Indian Constitution.
- 2. Comprehend the functioning of Union Legislature and Executive.
- 3. Develop a deeper understanding of Executive and Legislature at state level.
- 4. Understand the functioning of Indian Judiciary.
- 5. Understand the philosophy of Indian Constitution.
- 6. Comprehend the functioning of Legislature, Executive & Judiciary.
- 7. Develop a deeper understanding of Centre State relations.
- 8. Analyse the role of Caste, Religion, Region in Indian Politics.

Indian Political Thinkers (Option- II)

Course Outcomes:

- Students will be able for a better understanding about the fundamental concepts of Indian Political thoughts.
- Students will be able to analyses the Gandhian approach and other well known Indian social reformers.
- Awareness about the distinctive features of political theory and modern political thought of India.
- Sense to analyze the different aspects of political theory and the contribution of the modern India thinkers to political theorizing and relative autonomy of Indian political thought.
- An in-depth study of the dynamics of various changes that took place in India in this period.
- Acquaint students with the main issues and concerns in the public life of a regional society as it shaped in the context of colonialism, nationalism and modernity.

International relations (Option- II)

Objective: The paper aims to acquaint the students with major concepts and theories that are central to the understanding of contemporary International Relations.

Course Outcomes:

- 1. Understand the nature, scope, development of international relations.
- Comprehend the major approaches of international relations like idealism, Realism, liberalism and Marxism.
- 3. Develop an understanding of various concepts of International Politics.
- Gain deeper understanding of contemporary challenges like terrorism, climate Change and human rights.

Comparative Politics (Option-I)

Objective: The paper aims to acquaint the students with the Meaning, Nature and Scope of Comparative Politics and enable them make a comparative analysis of various political systems.]

Course Outcomes:

After the completion of this course, the students will be able to:

- Understand the nature, scope, traditional and modern concerns of comparative Politics.
- 2. Comprehend the approaches of comparative politics.
- Develop an understanding of constitutionalism and its history, nature and Types.
- 4. Compare the political institutions of UK, USA and India.

International organizations (Option- II)

Objective: The paper aims at acquainting the students with the historical evolution of International organization. It also explores the working of United Nations.

Course Outcomes:

- 1. Understand the evolution and growth of international organisation.
- 2. Comprehend the working of the organs of the United Nations.
- 3. Critically analyse the UN role in establishing peace.
- 4. Develop a deeper understanding of democratization process of UN.

Course outcomes in the Subject of Punjabi

(At undergraduate and postgraduate level)

1. Class B.A. Ist Semester:

Subject- Punjabi Elective

: course code : EP-21

Main objectives:

- To develop a bonding with the mother tongue of the student.
- The students get to know and understand his / her native language in a far better way
- To make students familiar with the knowledge about the modern Punjabi poetry Punjabi novel.
- The course also provides knowledge about official terminology to make enable the students for office –
- It also provides knowledge about Punjabi Grammar .Punjabi idioms and letter- writing to deal with official requirements.
- Class :B.A. IInd Semester : Subject Punjabi Elective : Course code : EP 22 :

Main objectives

- The curriculum of this course includes text books; Kav-Naad(poetry), Ikangi bahurangi (one-act -play)
- To develop bonding with mother tonge of the student and spoken/ writing skills in native language .
- To make familiar with the knowledge about modern Punjabi poetry, Punjabi one –act play by studying some prominent writings in Punjabi.
- To make enable the students in writing of personal letters.
- course provides knowledge about Punjabi grammar ,Punjabi proverbs, official terminology.
 - Class : B.A. IIInd Semester : Subject Punjabi Elective : Course code : EP 23 :

Main objectives:

- The curriculam of this course includes text books; kay -trangan(poerty), katha yatra(short story)
- The course provides knowledge about some sufi, kissa ,bir poets of Punjabi, and short story writers in Punjabi to create interest in reading of literature.
- The course also provides knowledge Punjabi prosody ,literary terminology to make students enable in creative writings in Punjabi.
 - 4. Class :B.A. iv th Semester : Subject Punjabi Elective : Course code : EP 24 :

Main objectives:

- The curriculam of this course includes text books; kav-tarangan (poetry), history of Punjabi literature (1701-1850)
- To make aware the students about roots of Punjabi literature, origin and development of Punjabi literature.
- To provide knowledge about Punjabi grammar ,(one word substitution for many), Punjabi metaphors.
- course also includes literary terminology for understanding the litierary terms.
- 5. Class :B.A. Vth Semester : Subject Punjabl Elective : Course code : EP 25 :

- The curriculum of this course includes text books; kav- jotan(poetry). Gad-darpan(prose).
- Course provides knowledge about Gurmat kav, Sufi kav, kissa kav and bir kav and some prominent Writers of Punjabi prose.
- _ The course provides knowledge about the concept of translation also .
- _ A multiple choice based course for reading the syllabus at micro level is also included .

Class :B.A. VIth Semester : Subject – Punjabi Elective : Course code : EP 26 :

Main objectives:

- The curriculam of this course includes text books; kav- jotan(poetry), history of Punjabi literature(1700 tak)
- The course makes the students enable to know about the great traditions in Punjabi poetry and roots of Punjabi literature.
- The course also includes the concept of translation from Punjabi to Hindi .

7. Class B.Sc. 3rd semester, Subject- Punjabi Compulsory, Course Code: PU-23

Main objectives:

- The curriculam of this course includes text books; kay -trangan(poerty), katha yatra(short story)
- The main objective of the course is to outcome from mental pressure by enjoying the interested writings in mother tongue.
- The programme connects the students to their roots and enahances their critical thinking.
- 8. Class B.Sc. 4th semester, Subject- Punjabi Compulsory, Course Code: PU-24

Main objectives:

- The curriculam of this course includes text book; kay -trangan(poerty).
- The course helps the students for bonding with their mother tongue.
- It also makes the students enable for writing of advertisement of property and other articles.
- 9. Class M.A. Punjabi- ist Semester, Subject- Madhkali Punjabi Kavita-Course Code -Paper-1(i)

Main objectives:

- The course includes three prominent Punjabi writers; Shri. Guru Nanak Dev (japujee). Baba Sheikh Farid (Shabad te Shalok). Bhagat Kabir (Bani) to make students familiar with top spiritual writings of punjabi literature and philosophy.
- The course makes the students enable to work for upliftment of the society and struggle with the social evils.
- 10. Class: M.A. Punjabi- ist Semester, Subject- Adhunik Punjabi Galp, Course Code -Paper-2(i)

Main objectives:

- This course of Adhunik Punjabi Galp includes three prominent Punjabi novelists; Nanak Singh, Gurdial Singh, Jasvinder Singh and their novels.
- The course makes enable the students to familiar with the problems of the society and its way of reforming.
- It also encourages the students for reading of Punjabi literature and its impacts on the society.
- 11. Class:M.A. Punjabi- ist Semester, Subject- Sahit Sidhant te Viharak Aalochna, Course Code -Paper-3

Main objectives:

- This core paper includes different theories of Punjabi literature, Indian and western literary theories to make the students enable to read and perception of literature in depth.
- The course emphasizes for developing critic and synonyms knowledge among the students.
- The course includes a part of 'Practical Criticism' to develop capability of practical work on Punjabi poetry.
- 12. Class: M.A. Punjabi- ist Semester , Subject- History of Punjabi Literature(upto1850A.D.) Course Code Paper-4

- The course includes the history of Punjabi literature to make students enable to know about the roots of Punjabi literature.
- It also emphasizes to know about the origin and development of Punjabi literature.

13. Class: M.A. Punjabi- ist Semester , Subject-Parvasi Punjabi Sahit , Course Code -Paper-5(ii)

Main objectives:

- The objectives of the course is to make students familiar with the concept of DIASPORA by reading three Punjabi diasporic writers.
- To make students familiar with the major problems being faced by the diasporic people and their achiements.
- Students learn more basic knowledge about other countries and take interest in world journey.

14. Class M.A. Punjabi- IInd Semester , Subject- Madhkali Punjabi Kavita -Course Code -Paper-6 (i)

Main objectives:

- This course includes three Punjabi poets: Shri Guru Gobind Singh (Chandi di Vaar), Waris Shah (Heer), Shah Mohammad (Jangnama) to make students enable to know about the medieval Punjabi poetry.
- The course spreads good vibes and moral values among the students as these writers are known as social reformers.

15. Class: M.A. Punjabi- 2nd Semester , Subject- Adhunik Punjabi Galp, Course Code –Paper-7(i)

Main objectives:

- This course includes three Punjabi short story writers, Kulwant Singh Virk, Ajit kaur and Manmohan Bawa with their writings.
- It helps to develop in reading of short story and its impacts on society.
- The course introduces about the social aspects like brotherhood, feminism and Punjabi culture.

Class:M.A. Punjabi- 2nd Semester, Subject- Sahit Sidhant te Viharak Aalochna, Course Code –Paper-8 Main objectives:

- This core paper includes different theories of Punjabi criticism to develop analytical skill among the students about literature.
- This course includes a part of PRACTICAL CRITICISM to develop capability among the students about practical work on Punjabi literature.

17. Class: M.A. Punjabi- 2nd Semester , Subject- History of Punjabi Literature(1851 onwards) Course Code – Paper-9

Main objectives:

- The course includes the history of Punjabi literature from 1851 onwards with new trends in Punjabi literature like ;modern poerty, novel, short story,drama,diary etc. for knowledge these trends.
- To prepare the students to appear in the competitive exams at school and college level.

18. Class: M.A. Punjabi- 2nd Semester , Subject- Parvasi Punjabi Sahit; Course Code -Paper-10 (II)

Main objectives:

The Curriculum includes three prominent diasporic Punjabi writers to make students familiar with the literature in Punjabi language being written in abroad.

- Students learn many basic knowledge about other countries and achievements/problems being faced by the Indian people in abroad.
- Students took interest in world journey and good jobs in other countries.

19. Class: M.A. Punjabi- 3rd Semester , Subject- Adunik Punjabi Kavita ; Course Code -Paper- 11

- This Course includes three prominent adhunit Punjabi poets and their writings.
- Students learn about new trends in Punjabi poetry and skills in writing of Punjabi poetry.

20. Class: M.A. Punjabi- 3rd Semester , Subject-Punjabi Natak ate Ikangi ; Course Code –Paper- 12 (I)

Main objectives:

22

- The Curriculum includes three Punjabi play writes and their writings to develop the activities of play and one act play.
 Nath is consistent as a consistent of a consistent of activities. Natk is considered as mirror contemporary society. Similarly Punjabi natak also represent problem of modern Punjabi society.

21. Class: M.A. Punjabi- 3rd Semester, Subject- Adhunik Punjabi Vartak; Course Code -Paper- 13

Main objectives:

- The Curriculum includes three famous Punjabi prose writers.
- Prose is a medium for any literary writer to express his personal experiences in words.
- The subject of vartak is connected with social life.
- It becomes the write guide for the students in upliftment of the society.
- 22. Class: M.A. Punjabi- 3rd Semester, Subject-Bhasha Vigyan ate Punjabi Bhasha Vigyan; Course Code Paper-14 Main objectives
- The curriculum includes some major topics related to the subject regarding Punjabi language, its origin in development.
- It inspire the students to rise above caste, religion, race, gender for betterment of the whole humanity.
- To prepare for competitive exams in the subject of Punjabi.
- 23. Class: M.A. Punjabi- 3rd Semester, Subject- Lokdhara ate Punjabi Lokdhara; Course Code –Paper- 15

Main objectives

- The Course includes various aspects of lokhdhara to encourage the students to know about the rich traditions of the society.
- Curriculum is so interested that students know about the social rituals and their scientific reasons.
- 24. Class: M.A. Punjabi- 4th Semester, Subject- Adhunik Punjabi Kavita; Course Code -- Paper- 16

Main objectives

- Curriculum includes three modern Punjabi poets.
- Modern Punjabi poetry represents the problem of modern society.
- The purpose of teaching this subject is to make the students aware of social and cultural issues of modern times.

25. Class: M.A. Punjabi- 4th Semester, Subject- Punjabi Natak ate Ikangi; Course Code -Paper- 17 (I)

Main objectives

- The Curriculum includes three Punjabi playwrites and their writing to develop the activities of play and one act play.
- Matak is considered as mirror of contemporary society. Similarly Punjabi natak also represents problems of modern. Punjabi society.

26.Class: M.A. Punjabi- 4th Semester , Subject- Adhunik Punjabi Vartak ; Course Code -Paper- 18

- The Curriculum includes three famous Punjabi prose writers.
- Prose is a medium for any literary writer to express his personal experiences in words.
- The subject of vartak is connected with social life.
- It becomes the write guide for the students in upliffment of the society.

- 27. Class: M.A. Punjabi- 4th Semester, Subject- Bhasha Vigyan ate Punjabi Bhasha Vigyan; Course Code –
 Paper- 19
 Main objectives
- The curriculum includes some major topics related to the subject regarding Punjabi language, its origin in development.
- It inspire the students to rise above caste, religion, race, gender for betterment of the whole humanity.
- To prepare for competitive exams in the subject of Punjabi.
- 28. Class: M.A. Punjabi- 4th Semester, Subject- Sabhyachar ate Punjabi Sabhaychar; Course Code -Paper-16

- The course will shed a light on the sabhyachar of Indian and Punjabi society.
- It will encourage the students for development of society.
- It will inspire the students to rise above caste, race, gender, religion for the betterment of the whole humanity

Department of Political Science Government (PG) College Ambala Cantt Affiliated to Kurukshetra University Kurukshetra

Programme outcomes for BA (Political Science)

- Demonstrate a detailed knowledge and understanding of selected fields of study in core disciplines in the humanities, social sciences and languages;
- Apply critical and analytical skills and methods to the identification and resolution of Problems within complexed changing social contexts.
- 3: Demonstrate a general understanding of the concepts and principles of selected areas of study outside core disciplines of the humanities, social sciences and languages;
- 4: Apply an independent approach to knowledge that uses rigorous methods of inquiry and appropriate theories:
- 5: Articulate the relationship between diverse forms of knowledge and the social, Historical and cultural contexts that produced them;
- 6: Communicate effectively and show ability to read, write, listen to and speak in a Chosen language/s with fluency;
- 7: Act as informed and critically discerning participants within the community of Scholars, as citizens and in the work force;
- 8: Work with independence, self-reflection and creativity to meet goals and challenges in The workplace and personal life.

Indian government and politics opt-I

Objective: The paper aims at introducing the students to major political processes and Institutions those are integral to politics in India.

Course Outcomes:

- 1. Understand the basic features of Indian Constitution.
- 2. Comprehend the functioning of Union Legislature and Executive.
- 3. Develop a deeper understanding of Executive and Legislature at state level.
- 4. Understand the functioning of Indian Judiciary.
- 5. Understand the philosophy of Indian Constitution.
- 6. Comprehend the functioning of Legislature, Executive & Judiciary.
- 7. Develop a deeper understanding of Centre State relations.
- 8. Analyse the role of Caste, Religion, Region in Indian Politics.

Indian Political Thinkers (Option- II)

Course Outcomes:

- Students will be able for a better understanding about the fundamental concepts of Indian Political thoughts.
- Students will be able to analyses the Gandhian approach and other well known Indian social reformers.
- Awareness about the distinctive features of political theory and modern political thought of India.
- Sense to analyze the different aspects of political theory and the contribution of the modern India thinkers to political theorizing and relative autonomy of Indian political thought.
- An in-depth study of the dynamics of various changes that took place in India in this period.
- Acquaint students with the main issues and concerns in the public life of a regional society as it shaped in the context of colonialism, nationalism and modernity.

International relations (Option- II)

Objective: The paper aims to acquaint the students with major concepts and theories that are central to the understanding of contemporary International Relations.

Course Outcomes:

- 1. Understand the nature, scope, development of international relations.
- Comprehend the major approaches of international relations like idealism, Realism, liberalism and Marxism.
- 3. Develop an understanding of various concepts of International Politics.
- Gain deeper understanding of contemporary challenges like terrorism, climate Change and human rights.

Comparative Politics (Option- I)

Objective: The paper aims to acquaint the students with the Meaning, Nature and Scope of Comparative Politics and enable them make a comparative analysis of various political systems.]

Course Outcomes:

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After the completion of this course, the students will be able to:

- Understand the nature, scope, traditional and modern concerns of comparative Politics.
- Comprehend the approaches of comparative politics.
- Develop an understanding of constitutionalism and its history, nature and Types.
- 4. Compare the political institutions of UK, USA and India.

International organizations (Option- II)

Objective: The paper aims at acquainting the students with the historical evolution of International organization. It also explores the working of United Nations.

Course Outcomes:

- 1. Understand the evolution and growth of international organisation.
- Comprehend the working of the organs of the United Nations.
- Critically analyse the UN role in establishing peace.
- Develop a deeper understanding of democratization process of UN.

Course outcome B Sc Physics (NM and Computer Science)

Semester I-

Paper: PH-101 Classical Mechanics and theory of relativity

- Describe various conservations laws and their applications in every-day life.
- Provide knowledge about applications and limitations of Newton's Laws of motion in inertial and non-inertial frames of references.
- Explain Einstein's theory of relativity as well as special theory of relativity and changes associated with length, time and mass.

Paper: PH-102 Electricity Magnetism and Electromagnetic Theory

- Explain mathematical theorems linked with concepts of divergence, curl and gradient of electric field and their co-relation with various physical phenomena in nature.
- Introduce the concept of magnetism and classification of materials based upon their response to external magnetic field and heat losses during cycle of magnetism (hysteresis loop).
- Describe electromagnetic waves, their properties and their propagation through a medium as well as space.
- Explain the working of LC, RC, LCR resonant circuits and significance of resonance in series and parallel resonant circuits.

Semester II

Paper: PH-201 Properties of Matter and Kinetic Theory of Gases

- · Calculate the moment of inertia of rigid bodies with different shapes.
- Introduce the terms like elasticity, rigidity, stress, strain and explain various methods to find the elastic constants for different materials.
- Understanding of kinetic theory of gases by exercising ideal gas equation as well as Vander Waal's equation.
- Understanding the process of diffusion of gases by studying the Maxwell law of speed distribution.

Paper: PH -202 Semiconductor Devices

- Introduce the world of semiconductors by presenting diodes (Zener diode, light emitting diodes, photo diodes), Solar cell and half-wave/full-wave rectifiers.
- Emphasis on usage of semiconductors in constructing transistors, amplifiers, Cathode Ray Oscilloscope (CRO) and other electronic instruments.

Semester III

Paper: PH -301 Computer Programming and Thermodynamics

- Introduce the computational physics through basic knowledge about computer hardware and software and its applications.
- Learning the FORTRAN programming and motivating to use it in solving complex mathematical problems and its further use in research work.
- Understanding Carnot heat engine and use this information to understand the working of refrigerators used at homes.
- Describe basic laws of thermodynamics and various energy exchange processes in our surroundings.
- Application of laws of thermodynamics in heaters, refrigerators, coolers, turbines etc. and hence find their efficiency.

Paper: PH- 302 Wave and Optics -I

- The students are able to understand about various optical phenomena related to light with applications in daily life.
- Understanding the phenomena of interference and diffraction and hence explaining many natural phenomena like formation of rainbow, colour in soap bubbles, colour of thin films etc.

Semester IV

Paper: PH - 401 Statistical Physics

- Explain the postulates of Maxwell-Boltzmann Statistics, Fermi-Dirac Statistics and Bose-Einstein Statistics.
- Understanding the theory of specific heats of solids through Dulong and Petit law, Einstein theory and Debye theory.

Paper: PH - 402 Wave and Optics II

- Understanding the concepts of polarization and explanation of principle and working of polarimeter along with the techniques to produce and detect circularly and elliptically polarized light.
- Understanding Fourier theorem and to derive Fourier series for different types of waveforms.

Semester V:

Paper: PH - 501 Quantum and Laser Physics

- Helps the students to understand the base and fundamental concepts of quantum mechanics in terms of its evolution and applications.
- It throws light on the co-existence of particle and wave nature of material particles and their applications in photoelectric effect and Compton effect.
- It explains the meaning of uncertainty in physics and how it can be applied to explain various phenomena like existence of protons and neutrons and non existence of electrons in nucleus.
- The course explains the behavior of a free and bound particle in terms of Schrodinger equation and explains the role of potential by way of applications such as particle in a box. It makes the students understand the concept of tunneling, reflection and transmission probabilities at different energies of the particle.
- Makes the students familiar with optical phenomena and different concepts related to laser physics.
- Helps in understanding the qualitative understanding of basic lasing mechanism, types of Lasers, characteristics of Laser Light
- Helps to understand and appreciate the applications of Lasers in developing LED, Holography, in materials processing, in Medicine, Industry and Military.
- The students develop the idea of optical fibres, their properties and applications of optical fibres.

Paper: PH -502 Nuclear Physics

- Describe the structure of nuclei and its properties by using different methods for the determination size, mass and binding energy.
- Explain radiation decay like alpha-decay, Beta-decay, gamma-decay and their respective spectra.
- Understanding the interaction of different nuclear radiations with matter and understanding the role of nuclear accelerators and nuclear detectors in accelerating and detecting charged as well as uncharged particles.

Semester VI

Paper: PH -601 Solid State and Nano Physics

- Introducing the basic terms like unit cell, primitive cell and understanding the crystal structure by X-ray diffraction methods and effect of different symmetry operations on the crystal structure.
- Explain BCS theory of Super conductivity and classification of Superconductors along with practical applications of superconductors.
- Introducing the concept of Nanoscience and understanding the techniques for the synthesis of Nanomaterials.
- Evaluation of Nanomaterials with the help of optical spectroscopy, electron microscopy, surface scanning, thermal techniques etc.
- Application of Nanomaterials in daily life and their impact on environment.

Paper: PH - 602 Atomic and Molecular Spectroscopy

- Introducing the historical background of atomic spectroscopy and explaining various theories to explain the fine structure of hydrogen spectra.
- Describing the Alkali and alkaline spectra and their comparison with hydrogen spectra.
- Explain the effect of electric and magnetic fields on atomic spectra and unfolding the important terms like Zeeman effect, Paschen Effect and Stark effect.
- Introducing rotational, vibrational and electronic transitions and hence explain the Raman effect in molecules.